

# Public Utilities

*FORTNIGHTLY*



---

*July 2, 1936*

**THE POWER ACT OF 1935**

*By Oswald Ryan*

« »

**How the "Sliding Scale" Reduces Rates**

*By William A. Roberts*

« »

**Must We Have Government by Subterfuge?**

*By Tully Nettleton*

**105**

**How the TVA Really Hurts Private Utilities**

*By Jo. C. Guild, Jr.*

---

**PUBLIC UTILITIES REPORTS, INC.  
PUBLISHERS**



Terrace model provides INCREASED capacity for large installations

# Are you taking advantage of **Silex** load building possibilities

GLASS COFFEE MAKER

Silex offers you the opportunity of making a tremendous sales drive on commercial equipment. There are Silex models of various sizes to meet the requirements of every restaurant and soda fountain on your lines . . . every one of them is a prospect for increasing your load.

Today your opportunity is greater than ever before. The new high-speed elec-

tric models are rated from 1170 watts to 8 KW. Aggressive utilities have already given Silex "first place" in huge promotion plans—and repeated. Sell speed and service to all restaurants and soda fountains. All models are equipped with Pyrex brand glass, guaranteed against heat breakage. Gas models are priced from \$24.85 to \$97.95. Electric models from \$17.45 to \$97.95. Electric Coffee Bar \$395.00.



provides coffee as needed for fountains

**WRITE . . .**

**for a Silex tie-up today**

*Signature*  
**SILEX**  
GLASS COFFEE MAKER

**THE SILEX COMPANY**

**DEPT. 72**

**HARTFORD, CONN.**

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*





July 2, 1961

**BU**

**70-1**

**R**

**NDU**

We operate  
truck runs  
ale C. M.  
truck Co.  
trucks have  
cities  
back up  
over the  
way, be

For three  
is daily  
een delays  
te the fa  
temperat

incidents  
after the  
podrich

here's a  
e of the  
e fast.

ugh—  
vertow  
thout a  
leage n

res that  
ns will  
ter, to

oney-as  
ple Pr  
th per  
ler wi

**W TR**



**LYFLEX-**  
stresses  
the tire  
separati  
weaken

**LY-LOCK**  
the fre

**GO**  
**ECI**

*This*

# BURNING DESERT TORTURES TIRES

## 70-MILE DAILY SPEED RUN SETS TIRE ENDURANCE RECORD

We operate one of the most unusual truck runs in the country," says Mr. Dale C. Ramsey, owner of the Valley Truck Company, Los Angeles. "Our trucks haul the Los Angeles Examiner cities in the Imperial Valley. We pick up papers at midnight and deliver them in Mexicali, 235 miles away, before breakfast.

For three years we have maintained this daily service and have never once been delayed by tire failure. This is despite the fact that, crossing the desert, the temperature will run as high as 130°. Incidentally, we have been averaging better than 64,000 miles with our Goodrich Triple Protected Tires."

Here's a real trucking job for you—the toughest on record. Schedules are fast. Curves are sharp. Roads are rough—sizzling hot. And yet Goodrich Silvertowns not only carry the loads without delays—but they set amazing mileage records as well!

Tires that stand up on burning desert roads will certainly handle your job better, too. Why not investigate this money-saving tire? Find out about Triple Protection—the secret of Goodrich performance. Any Goodrich dealer will give you the facts.

### NEW TRIPLE PROTECTION WORKS



**PLYFLEX**—distributes stresses through the tire—prevents separation—checks weakness.

**PLY-LOCK**—protects tire from breaks

caused by short plies tearing loose above the bead.

**3. 100% FULL-FLOATING CORD**—eliminates cross cords from all plies—reduces heat in the tire 12%.



LEAVES LOS ANGELES 12:15 A. M.



CROSSES DESERT—TEMPERATURE 130°



ARRIVES MEXICALI, MEXICO, 5:55 A. M.

# Goodrich Triple Protected Silvertowns

PECIFY THESE NEW SILVERTOWN TIRES FOR TRUCKS AND BUSES

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

Editor—HENRY C. SPURR  
Associate Editors—ELLSWORTH NICHOLS, FRANCIS X. WELCH  
Contributing Editor—OWEN ELY

# Public Utilities Fortnightly



VOLUME XVIII

July 2, 1936

NUMBER 1

Contents of previous issues of PUBLIC UTILITIES FORTNIGHTLY can be found by consulting the "Industrial Arts Index" in your library.

Utilities Almanack .....	1
George Washington Bridge ..... (Frontispiece) .....	2
The Power Act of 1935 ..... Oswald Ryan .....	3
How the "Sliding Scale" Reduces Rates ..... William A. Roberts .....	11
Must We Have Government by Subterfuge? ..... Tully Nettleton .....	21
How the TVA Really Hurts Private Utilities ..... Jo. C. Guild, Jr. ....	28
Financial News and Comment ..... Owen Ely .....	36
What Others Think .....	42
The Power Industry Fights Back	
Governor Landon's Record on Utility Questions	
Will Electric Rates Keep Going Down Indefinitely?	
The Latest Utility Rulings .....	53
Public Utilities Reports .....	59
Titles and Index .....	60
<i>Advertising Section</i>	
Pages with the Editors .....	6
In This Issue .....	10
Remarkable Remarks .....	12
The March of Events .....	47
Index .....	90

**P** This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

## PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

Publication Office ..... WILDER BUILDING, ROCHESTER, N. Y.  
Executive, Editorial, and Advertising Offices ..... MUNSEY BUILDING, WASHINGTON, D. C.

PUBLIC UTILITIES FORTNIGHTLY, a magazine dealing with the problems of utility regulation and allied topics, including also decisions of the regulatory commissions and courts, reprinted from *Public Utilities Reports, New Series*, such reports being supported in part by those conducting public utility service, manufacturers, bankers, accountants, and other users. Entered as second-class matter April 29, 1915, at the Post Office at Rochester, N. Y., under the Act of March 3, 1879; copyrighted, 1936, by Public Utilities Reports, Inc. Printed in U.S.A.

PRICE, 75 CENTS A COPY

ANNUAL SUBSCRIPTION, \$15.00

## Gas Line Maintenance And Service Body



**TYPE 3278**

**THE AMERICAN GAS LINE MAINTENANCE AND SERVICE BODY** has been developed for utilities for use on trucks equipped with air compressors.

The equipment shown has a compressor of two pavement breakers or one jack hammer capacity which can be mounted on standard long wheelbase trucks, taking its power from the truck motor using a power take-off which develops the full engine torque. The compressor occupies about one-fourth of the truck body space, leaving ample compartment space to carry men, tools and materials.

**MAY WE NOT SEND YOU DATA ON EQUIPMENT TO MEET YOUR NEEDS?**

*Largest Exclusive Manufacturers of Standard  
Utilities Equipment for Motor Vehicles*

**THE AMERICAN COACH & BODY COMPANY**

**3809-15 Clark Avenue, CLEVELAND, OHIO**

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*

## Pages with the Editors

ALL the recent furore in Congress about the complexity of the latest revenue law recalls an amusing incident that happened several years ago when Representative Treadway of Massachusetts asked an expert on the staff of the House Ways and Means Committee to explain in plain English what certain language in a revenue bill then under consideration meant.

THE expert replied facetiously, "Mr. Treadway, it cannot be explained in plain English." He went on to point out that the House Ways and Means Committee was composed of "school teachers, lawyers, and former professors of Greek," who seemed unable to express themselves except in the dull, stilted, and redundant language of a Federal statute. Subsequently, Representative Treadway took the position that since most members of the House were unable to understand the measure anyway, it was a perfect waste of time to debate it. And the bill was passed under a gag rule.

HOWEVER, not all legislative measures are so inherently puzzling as tax bills. Nobody immediately interested, for example, in the Public Utility Act of 1935 seemed to have much trouble understanding it. The utility holding companies understood it only too well, particularly the notorious § 11, otherwise known as the "death sentence."

JUST the same, all of the controversy over



OSWALD RYAN

*More power to the Federal  
Power Commission*

(SEE PAGE 3)

the holding company sections of the Public Utility Act had the general effect of diverting public attention from the second portion of the act which has since become united with the Federal Water Power Act (as amended) to form the basic law which authorizes the operation of the increasingly important Federal Power Commission.

AND so it occurred to ye editors that it was about time to shed a little light upon this comparatively obscure statutory corner by getting an article that would explain in "plain English" the general import of the Federal power legislation, and what the Federal Power Commission is likely to do about it. We thought and we thought—trying to decide upon the writer best qualified to undertake such an assignment. Finally it dawned upon us—the perfectly obvious answer. If you wanted an explanation of a banking law, you'd get a bank's lawyer, wouldn't you? If you wanted an explanation of a Treasury law, you'd get a Treasury lawyer, wouldn't you? Therefore, who is better qualified to explain the laws under which the Federal Power Commission operates than the commission's own head lawyer? The answer, of course, is nobody. (We don't mean the lawyer.)

AND so in this issue (beginning page 3) we present an article by OSWALD RYAN, general counsel for the Federal Power Commission. Mr. RYAN is a Hoosier who, after college and legal education at Harvard, devoted himself to law practice in Indiana where he served as city and state's attorney. He also served as a member of the European Immigration Commission, as well as a national officer of the American Legion. He has previously written for the FORTNIGHTLY and is the author of several books on government.

SEVERAL weeks ago Governor Lehman of New York signed a law passed by the legislature of that state which gives express authority to the public service commission to conclude sliding-scale profit-sharing rate agreements with public utility companies. In other words, it was formally recognized by the leading state of the Union that the so-called Washington Plan is a matter for serious consideration in the field of utility regulation. Earlier this year, governors in other states were suggesting to their legislatures that a sliding-scale agreement law might be an aid to regulation. A widely discussed volume, recently reviewed in the FORTNIGHTLY, went so far as to suggest that the sliding scale may well become the accepted form of regulation of the future.

# 'We lithograph these pieces in our own office... AT SURPRISING SAVINGS!'

Within your own offices lie opportunities to stop the flow of dollars into *expense* and add them to your *profits*, every month, year after year.

Many public utilities whose requirements are similar to your own, are producing up to 85% of the printed forms and advertising pieces they need—by MULTILITH, simplified offset lithographic process for office use—at costs never before so low.

Your employees can quickly learn Multilith operation and save up to 60% while turning out, in one or more colors and at high speed, office and plant forms that meet your high standards. They can eliminate overstocking... reduce obsolescence... minimize waste... save valuable storage space.

## Ideas transformed into ACTION within a few hours

With MULTILITH you have the advantage of quick action to speed out illustrated business-building advertising on the day the idea is born. You can flash news of new products and services, price revisions and special offerings to prospects and consumers within a few hours' time, by Direct Mail.



copy for reproduction can be placed on Multilith flexible plates in many ways. Without preliminary preparation, you can write, draw, trace, rule or typewrite on them. Or illustrations and text matter can be photographically applied. From these plates, on MULTILITH, you can quickly produce quantities as required

for your needs. Multigraph Representatives will gladly discuss MULTILITH advantages and savings with you. Or write on business stationery for illustrated Booklet 29, "MULTILITH... Simplified Office Lithography," to Multigraph Company, Division of Addressograph-Multigraph Corporation, Cleveland, Ohio.

## MULTILITH... A MULTIGRAPH PRODUCT

OFFICES IN ALL PRINCIPAL CITIES OF THE WORLD

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



WITH such increasing attention and importance, we have felt justified in developing a series of articles on the Washington Plan. In a sense, we take some pride in this task, because it was the FORTNIGHTLY that "discovered" (in the sense of giving national publicity) the peculiar success of the original agreement between the District of Columbia and the Potomac Electric Power Company. That was in 1930 in an article by the late Aaron Hardy Ulm—an article which immediately attracted attention throughout the country and which has since been reprinted, quoted, and referred to in one form or another literally thousands of times.

WITH the current issue (beginning page 11) we present our concluding article in this Washington Plan series. The author is WILLIAM A. ROBERTS, people's counsel of the District of Columbia, who will be recalled as a former contributor to this publication. Mr. ROBERTS received his engineering education at Tufts College and his legal training at Georgetown University (LL.B. '25). Prior to his appointment to his present post, he served as an examiner with the Interstate Commerce Commission and as special attorney for the District of Columbia Public Utilities Commission.

TULLY NETTLETON (whose article begins on page 21) first became interested in utility matters while a student at the University of Oklahoma from which he graduated in 1923. His interest in the subject increased when he entered the newspaper profession. He started out with the *Daily Oklahoman* and then proceeded to the service of the *Christian Science Monitor*, for which publication he is now a Washington editorial writer.

WHAT seems to intrigue Mr. NETTLETON



TULLY NETTLETON

*He wants the government to stop "kidding" itself on power projects.*

(SEE PAGE 21)



© Harris & Ewing

WILLIAM A. ROBERTS

*The Washington Plan is neither automatic nor fool-proof—needs careful attention.*

(SEE PAGE 11)

most about the utility situation is the strange method by which Federal power projects (which everyone knows perfectly well are power projects and would never have been attempted if they were otherwise) must be solemnly classified in court as "merely incidental" to some other alleged governmental functions, such as navigation, flood control, and so forth. He understands, of course, that this is to get around the Constitution, but he fails to see why, if it is desirable for the government to do these things, it is necessary to get around the Constitution. Why can't we be honest and change the Constitution? It is the forthright view of a layman who refuses to be impressed by legal sophistication.

ON July 12, 1933, the directors of The Tennessee Electric Power Co. met to elect a president to succeed B. C. Cobb. They decided to select the company's energetic general manager, Jo. C. Guild, Jr. It was an important decision because of the imminence of the fateful influence of the Tennessee Valley Authority. In this issue (beginning page 28) Mr. Guild displays his talent for stating his company's position with force and logic. Born in Chattanooga, Mr. Guild received his education at Virginia and Vanderbilt universities. He entered the service of the Chattanooga & Tennessee River Power Company in 1913 and remained during its reorganization into the present concern.

THE next number of this magazine will be out July 16th.

*The Editors*



**BOOKKEEPING?  
WHY MAN ALIVE,  
WE'VE GOT A  
CRACKER-JACK  
SYSTEM!**

*Maybe you're right . . . but 12 SIMPLE CHECKS  
will tell whether you're spending too much for it!*

few successful businesses could operate without a smooth-running accounting and bookkeeping system. But many are paying much too high a price for it. Give your system this simple twelve point check . . . and see if it still looks good to you.

**How many bills a month per operator do you average?** The Remington Rand Register Plan guarantees minimum of 30,000 bills per month per machine. These are completed bills, with operators making their own extensions, entering arrears and merchandise and totalling.

**How long does it take to get out current bills?** Under the Remington Rand System, current bills are completed the second day after the regular reading—allowing one day for picking up skips.

**What's the lag on final bills?** With Remington Rand all final bills are prepared and mailed the day following disconnection of service.

**How many accounts does each clerk post?** Under the Remington Rand plan each clerk can handle cash posting on a unit of 40,000 accounts.

**How many sources do you go to for a complete audit?** Under the Remington Rand system, abstract of billing, revenue analysis, accounts receivable, record of final bills and record of forfeited discounts are all audited from a single sheet.

**How much time is spent in reaching balances?** Remington Rand register sheets are held firmly in binders . . . cannot be mislaid or filed in wrong place.

**7 How much room do your records take up?** Remington Rand cuts the volume of your records 75% to 80% over any other ledgerless bookkeeping method.

**8 Where are your previous months' records filed?** In the Remington Rand Register, complete records of any one account are on consecutive sheets. Volume of records is so reduced to permit filing at the point of customer contact.

**9 Are you making best use of local offices?** For companies serving outside towns with branch offices, the Remington Rand Register plan makes it possible to take full advantage of available clerical time at local points.

**10 What does a rate change do to your system?** With Remington Rand equipment, simply a new totalizer or two is added to take care of the change without the machine leaving your office.

**11 What price personnel?** Remington Rand Register Plan requires less attention of important executives.

**12 What kind of support are you giving your operators?** Out-of-date or worn-out equipment can be a source of great waste—even though written off. Investigate the Remington Rand plan today.

**MANY OTHER REMINGTON RAND SERVICES**

The Remington Rand man offers many important services to utilities. He makes no sale without a net profit to the user! Phone him today or write Remington Rand Inc., Buffalo, N. Y. for expert analysis of your problems.

*Ok.. it's from Remington Rand*

# In This Issue



## In Feature Articles

National character of power industry requiring Federal control, 3.  
Scope of Federal Power Act of 1935, 4.  
Planned coordination of power resources and facilities, 5.  
Provisions for economic power map, 7.  
Encouragement rather than destruction of private initiative, 8.  
Sliding scale for rate regulation, 11.  
Defects of sliding-scale plan, 13.  
Extension of sliding scale to gas rates, 14.  
Gas rate reductions on sliding-scale plan, 18.  
Present-day action under old Constitution, 21.  
Theory of Tennessee Valley Authority decision, 22.  
Navigation, national defense, and power production, 22.  
Evasion of "yardstick" and "abundant life" ideas to sustain Federal projects, 23.  
Conservation of natural resources under TVA, 24.  
Constitutional amendment to permit governmental projects, 26.  
How the TVA hurts private utilities, 28.  
High cost of utility money in TVA region, 29.  
Antiutility propaganda by TVA, 29.  
"Adoption" of TVA rates, 31.  
Refusal of TVA to recognize state regulation, 33.  
Taxation of TVA, 33.  
Use of electricity in Tennessee valley, 34.

## In Financial News

Electric earnings best since 1931, 36.  
Recent corporation earnings, 36.  
Pacific Lighting Corporation as natural gas distributor, 38.  
Construction budgets for the electric industry, 40.  
Reviews on utility finance, 40.  
Gains in electric output for 17 systems, 40.  
New financing, 41.  
TVA's subsidized "yardstick," 41.

## In What Others Think

Attack on TVA by group of utilities, 42.  
Criticism of government power projects by public utility and other business men, 42.  
Governor Landon's record on utility questions, 44.  
Whether electric rates will keep going down indefinitely, 48.  
Competition as a rate regulator, 50.

## In The Latest Utility Rulings

Rejection of stockholders' objection to merger, 53.  
Approval of merger to effect economies, 53.  
Denial of rate increase for company lacking franchise, 54.  
Sufficiency of complaint against rates, 54.  
Tardy application for prohibition against rate making by commission, 55.  
Delivery of interstate natural gas to distribution company, 55.  
Jurisdiction of state commission over reorganization under Bankruptcy Act, 56.  
Exclusive jurisdiction over question of meter tampering, 57.  
Transportation of own goods not subject to regulation, 57.  
Invalidity of unfilled minimum charge, 58.  
Miscellaneous rulings, 58.

## In The March of Events

(Advertising Section, p. 47.)

Reopening of A. T. & T. investigation.  
Power issue as political issue.  
Communities favoring public ownership.  
Nation-wide survey of utility industry.  
Telephone service with El Salvador.  
Cheaper power urged.  
Simplification of utility accounting.  
World communication system.  
News throughout the states.

## REPRINTS FROM PUBLIC UTILITIES REPORTS

*Various regulatory rulings by courts and commissions reported in full text, pages 337-404, from 13 P.U.R.(N.S.).*

# A NEW SWITCHBOARD FOR STATION AUXILIARY SERVICE



Switchboard recently completed for central station service. Length 32' 2"; depth 60"; height 93"  
Photograph was taken at the I-T-E factory prior to shipment.

For public utility companies, I-T-E engineers design complete, steel-enclosed switchboards equipped with I-T-E air circuit breakers, the entire structures being developed expressly for central station service and particularly fitted to local conditions.

The 550-volt switchboard illustrated was recently fabricated at the I-T-E factory, complete with all bus, lugs, control wiring, control terminal blocks and bus channels. The board is of the I-T-E Multumite type with all bus connections arranged to withstand short circuits of 40,000 amperes.

The steel enclosure has a rugged skeleton of welded, angle-iron framework, covered with removable steel side plates and permanently welded top plates. Four removable truck-type circuit breakers are steel fronts which close individual truck compartments when the trucks are locked in position. Twenty-four pantograph-mounted circuit breakers are enclosed behind hinged, steel doors.

This construction provides a switchboard suitable for shipping and installation in units with all essential adjustments made at the factory.

## Truck Type Circuit Breakers

Four circuit breakers 2,500 ampere, 600 volt a-c, 3-phase, 60 cycle, 3-pole, to operate in air. Solenoid operated with shunt trip and trip free closing relay. Three 2500/5 through type current transformers mounted in stationary part of each truck cell. Interrupting capacity, 60,000 amperes at 600 volts a-c.

## Pantograph-Mounted Circuit Breakers

Twenty-two 400 ampere and two 800 ampere circuit breakers, 600 volt a-c, 3-phase, 60 cycle, 3-pole, air-immersed. External manual closing handle of the U-Re-Lite type. Two instantaneous overload trip coils with an adjustable calibration of approximately 10 times load rating. Interrupting capacity, 40,000 amperes at 600 volts a-c.

I-T-E engineers will gladly give details of Multumite construction as applied recently in a number of central station switchboards.

## I-T-E CIRCUIT BREAKER CO.

Capacity Range: 50,000 amperes and under, 750 volts and under

Extent of Line: Broadest in the industry

Location of Offices: All principal cities

Factory Address: 19th and Hamilton Sts., Philadelphia



# Remarkable Remarks

*"There never was in the world two opinions alike."*

—MONTAIGNE

G. E. WHITWELL  
*Vice President in Charge of Sales,  
Philadelphia Electric Company.*

"Our (electric) industry has never subscribed to the economic doctrine of scarcity."

HON. JAMES P. BUCHANAN  
*U. S. Representative  
from Texas.*

"You cannot push progress beyond the demands of the people who are progressing."

DR. ADAM S. BENNION  
*Assistant to the President,  
Utah Power and Light Company.*

"One of the finest industries in America, judged by any standard, is in the dog house."

MALCOLM P. MCNAIR  
*Professor, Harvard School of  
Business Administration.*

"Real business recovery in this country dates from the decision of the Supreme Court invalidating the NRA."

JOHN W. DAVIS  
*Former Democratic candidate  
for President.*

"It is the nature of bureaucracies that responsibility is widely diffused, decision is anonymous, and action painfully slow."

F. E. FROTHINGHAM  
*Chairman, Public Utilities  
Committee, Investment  
Bankers Association.*

"Contact with the government has shown that to resist its contentions is at the risk of meeting unfair competition or of suffering reprisals."

J. F. OWENS  
*President, Oklahoma Gas and  
Electric Company.*

"Our (electric) industry paid \$251,000,000 in taxes in the United States in the year 1935, or \$2 for every man, woman, and child in the country."

W. H. SWINNEY  
*Controller, West Penn  
Power Company.*

"The accountant can emerge from his generally accepted status of historian of things past and lend a helping hand to the doing of things to come."

NORMAN R. GIBSON  
*Vice President, Buffalo, Niagara  
and Eastern Power Corporation.*

"The extent to which electricity is used in industry and commerce has a direct relation to the rates charged the householder for domestic service."

SILAS H. STRAWN  
*Former President of American Bar  
Association and United States  
Chamber of Commerce.*

"The common feature of dictatorships is to put an end to freedom of speech, freedom of the press, freedom of meetings, and freedom of association for common ends."

# BURROUGHS PUBLIC UTILITY BILLING MACHINE

provides these

## NEW FEATURES

that cut billing time and billing costs

Whatever your billing plan—Stub, Bill and Ledger, or Register Sheet—new features and developments on this new Burroughs bring greater speed and simplicity to the entire job.

### MORE REGISTERS

This new feature permits automatic accumulation of figures by revenue classifications, rate blocks, etc., as a by-product of the billing operation.

### LINE PROOF

This new feature detects errors in writing the meter readings and consumption. Meter readers' errors in subtraction and operators' errors in writing the consumption figures, are detected before the incorrect figure is printed or added. This saves much time in making corrections and in proving bills.

### AUTOMATIC COUNT OF BILLS

The machine automatically counts the number of bills added in each register, for proof and statistical purposes.

### INCREASED SPEED OF CARRIAGE

Faster carriage operation speeds up the entire billing job.

### AUTOMATIC EJECTION AND STACKING OF COMPLETED BILLS

After the bill is written it is automatically ejected and stacked. Thus when the billing work is completed, the bills are in exactly the same order as when they were received by the operator.

*For full particulars, including a demonstration,  
telephone the local Burroughs office, or write direct.*

# Burroughs

6736 Second Boulevard, Detroit, Michigan

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*



HARPER SIBLEY  
President, Chamber of Commerce  
of the United States.

"The Chamber of Commerce of the United States has consistently supported the principle that regulation of electric and gas utilities should rest with the state and local authorities."

WALTER LIPPMANN  
Newspaper columnist.

"A statesmanlike and workable utility policy would have been based on the principle of an alliance with the enlightened members of the industry against the unenlightened members."

W. W. FREEMAN  
Vice President, Columbia Gas  
and Electric Corporation.

"The (private-owned electric) industry, in its extensive experience in rural and farm service, has found it impossible to realize anything like the estimated results upon which the REA program is based."

FRANK T. POST  
President, The Washington Water  
Power Company.

"Their (New Dealers) plan and program is the strangulation and destruction of the privately owned electric utilities, for the purpose of bringing about public ownership and political operation as the ultimate goal."

W. G. VINCENT  
Vice President, Pacific Gas  
and Electric Company.

"... the economic conduct of domestic customers (during the depression) is conclusive proof the value of electrical service is extremely high, in fact, higher than most other things for which they spend their income."

C. E. KOHLHEPP  
Vice President and Treasurer,  
Wisconsin Public Service  
Corporation.

"In this present-day welter of proposed classifications and accounting refinements—fantastic and otherwise—the possibility of receding rather than advancing, of simplifying rather than complicating, seems to have been completely overlooked."

C. E. GREENWOOD  
Commercial Director, Edison  
Electric Institute.

"But under the caption POLITICAL NEWS, thousands of column inches carrying the electric service message have been emblazoned for our (government) competitor in the newspaper free—often on the front page where space comes high."

DR. E. A. WHITE  
Director, Committee on the  
Relation of Electricity  
to Agriculture.

"The avenue often suggested for the farmer without available cash is to borrow. While there is no generalization which fits all cases, I doubt the wisdom of a general (rural electrification) movement designed to plunge agriculture further into debt at this time."

HAROLD L. ICKES  
Secretary of the Interior.

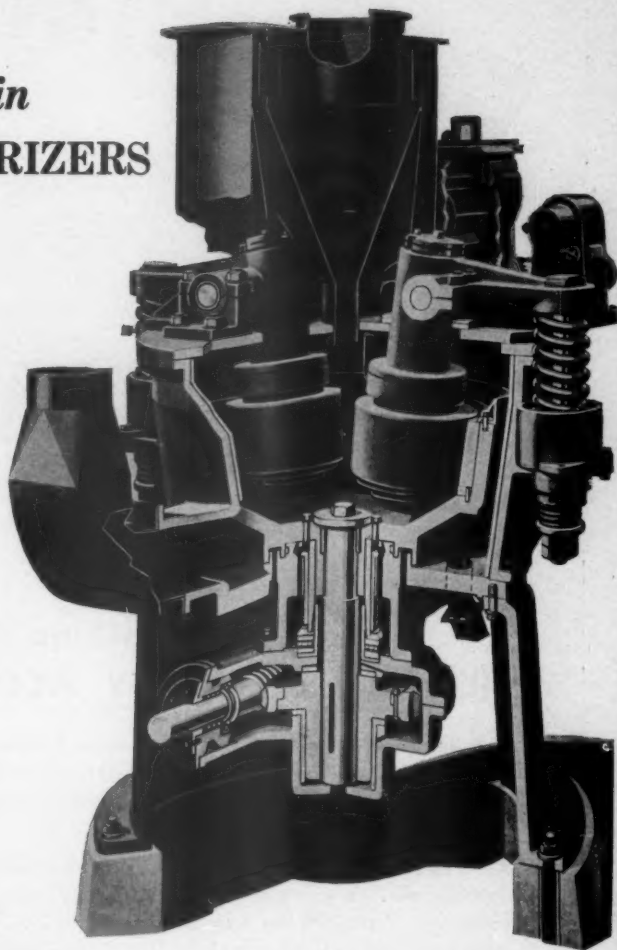
"Even today self-righteous critics, some of them with an ulterior purpose, insist that the Department of the Interior cannot be entrusted with any of the natural resources of America because of the national policy in the past and particularly because of the misdeeds of one or two men."



# CE-RAYMOND BOWL MILL

... the latest  
development in  
COAL PULVERIZERS

announced in Octo-  
ber 1935, the CE-  
Raymond Bowl Mill  
has to date been sold  
to serve boilers with  
an aggregate capacity  
of more than 5,000,-  
000 lbs. of steam per  
hour. Read the list of  
features below and  
you will see why this  
new design of pulver-  
izer has had such re-  
markable acceptance  
in so short a time.



**COMBUSTION  
ENGINEERING  
COMPANY, Inc.**

Madison Ave., New York, N. Y.

Canadian Associates,  
Combustion Engineering Corp., Ltd.  
Montreal

## FEATURES

**WIDE CAPACITY RANGE** Output can be varied in small increments from minimum to maximum rating with practically constant fineness.

**SIMPLIFIED OPERATION** Automatic feed, instantly adjustable. One standard constant speed motor for operating mill and fan. Few parts and rugged construction insure freedom from mechanical troubles.

**EFFECTIVE LUBRICATION** Positive oil circulation in all shaft bearings—gear mechanism running in oil—all grinding parts lubricated from outside while mill is running.

**LOW PULVERIZING COST** Due to low friction losses, mill consumes less power. Worm gear drive permits use of high speed motor. New grinding principle assures

rapid movement of material with resultant higher capacity and lower cost per ton.

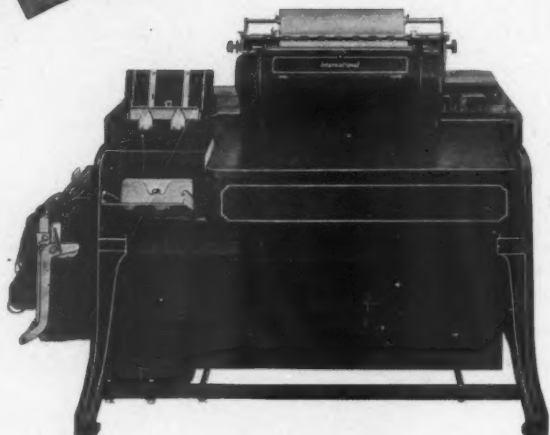
**CONTINUITY OF SERVICE** Mill capable of operating continuously at full load, month after month, without shutdowns. All grinding adjustments may be made without stopping.

**QUIETNESS** Elimination of metal-to-metal contact prevents pounding or vibration. Worm gear drive with ball bearings, main shaft with roller bearings and balanced operation insure quietness.

**LOW MAINTENANCE** Few wearing parts have hardened steel wearing surfaces. Rolls work only on layer of material, never against metal. Adjustment feature aligns face of roll parallel with grinding ring regardless of wear.

A-269

# FLEXIBILITY



## The same machine for all phases of UTILITY ACCOUNTING

¶ It isn't necessary to have a large volume of business to benefit by the punched card method of accounting. This modern, widely accepted accounting method now offers a unique and economical advantage to small and medium-sized companies.

¶ This advantage lies in the flexibility of the machine shown above. This one machine will take care of practically every type of utility accounting. Automatically, from punched cards, it will prepare complete, alphabetic and numerical reports. By simply altering the controls on this machine you can switch from Billing to Payroll to Operating Ledgers—all in a matter of minutes.

¶ Let us send you detailed information regarding the accounting economy which this flexibility means to you.

### INTERNATIONAL BUSINESS MACHINES CORPORATION

GENERAL OFFICES:  
270 BROADWAY, NEW YORK, N. Y.

BRANCH OFFICES IN  
PRINCIPAL CITIES OF THE WORLD



# *The Basic Principles of* **MODERN GROUP DRIVE**

## 2

FOR induction motors (the most widely used type of motors in industrial operations), there is a startling difference in efficiencies between large and small sizes.

At full load, the efficiency loss of one 20 hp. motor is 2.3 hp. But the sum of the efficiency losses of forty  $\frac{1}{2}$  hp. motors is 7.4 hp. In other words, the smaller motors have inherently almost  $3\frac{1}{2}$  times the electrical losses of the larger motor, for the same installed horsepower.

Putting this in another way, for every 20 hp. of current drawn, the larger motor produces 17.7 hp. of work, and the smaller motors only 12.6 hp. But the demand on the utility is the same in either case. And the customer who actually has 17 hp. in

machine loads demands 20 hp. in the one case, and 28 hp. in the second.

In the above discussion, call the case of the single 20 hp. motor a Modern Group Drive application, and the case of the forty  $\frac{1}{2}$  hp. motors a unit drive application—and we arrive at the same conclusion as in the previous discussion of power factor: That Modern Group Drive produces greater net revenue to the utility per kw.-hr. sold, and promotes better relations between the utility and its industrial customers.

For, low power factor penalties and high demand charges *never* adequately compensate the utility for its losses. Modern Group Drive removes both points of irritation, and builds mutual good will.

---

### **\*POWER TRANSMISSION COUNCIL**

1 Atlantic Street, Stamford, Conn.

\* A research association of producers and distributors of power, power units and mechanical equipment for the transmission of power.

**POWER DOLLAR SAVED IS A PROFIT DOLLAR EARNED**

---

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*

*During the last few years  
there has been a decided*

# SWING<sup>-</sup>to RILEY STEAM GENERATING UNITS

**A Few of the Companies who have recently installed  
Riley Boilers**

Lynn Gas & Electric Co. . . 205,000 lbs./hr.—430 lbs.—810° F.

*Stone & Webster Engineering Corp., Engineers*

W. Va. Pulp & Paper Co., Covington . . 375,000 lbs./hr.—600 lbs.—750°

Titanium Pigment Co. . . 125,000 lbs./hr.—448 lbs.—637° F.

*Ford, Bacon & Davis, Engineers*

Large Eastern Oil Refinery . . 300,000 lbs./hr.—646 lbs.—740° F.

Standard Oil of California . . 125,000 lbs./hr.—850 lbs.—760° F.

*Stone & Webster Engineering Corp., Engineers*

Pennsylvania Sugar Refining Co. . . 350,000 lbs./hr.—400 lbs.—505°

Carbide & Carbon Chemicals Corp. . . 80,000 lbs./hr.—600 lbs.—650°

W. Va. Pulp & Paper Co., Luke . . 375,000 lbs./hr.—631 lbs.—700°

Savannah Sugar Refining Co. . . 100,000 lbs./hr.—325 lbs.—620°

Kalamazoo Vegetable Parchment . . 150,000 lbs./hr.—275 lbs.—650°

*Prof. C. F. Hirschfeld, Consulting Engineer*

Forstmann Woolen Co. . . 80,000 lbs./hr.—450 lbs.—612° F.

General Aniline Co. . . 65,000 lbs./hr.—450 lbs.—670° F.

The swing of plant after plant to Riley Steam Generating Units during the past few years has undeniably established Riley as one of the leaders of the boiler industry.

Be sure to consult Riley when steam generating or fuel burning equipment is being considered.

## RILEY STOKER CORPORATION WORCESTER, MASS.

BOSTON

NEW YORK

PHILADELPHIA

PITTSBURGH

BUFFALO

CLEVELAND

DETROIT

CINCINNATI

ST. PAUL

ST. LOUIS

ATLANTA

KANSAS CITY

CHICAGO

LOS ANGELES

### COMPLETE STEAM GENERATING UNITS

BOILERS - SUPERHEATERS - AIR HEATERS - ECONOMIZERS - WATER-COOLED FURNACES  
PULVERIZERS - BURNERS - MECHANICAL STOKERS - STEEL-CLAD INSULATED SETTINGS

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*



## PROBLEMS?

**H**ERE is a typical Dennison "planning group," busy working on one of our customer's problems. One is a designer, two are research men, one a cost expert, and one a master printer.

Special gummings, counterfeit-proof papers, ingenious box construction, display or marketing problems . . . these are typical of the hundreds brought us and solved every year. The wide range of Dennison's high-speed, automatic facilities, and competent, experienced workmen assure you of quality production with economy.

Shipping tags, marking and inventory tags, gummed labels, and the like . . . these may not involve problems . . . but we make them—and we'd like to make them for you.

### Dennison Manufacturing Co.

FRAMINGHAM

MASSACHUSETTS



# EVEREADY

TRADE MARK

## INDUSTRIAL FLASHLIGHT

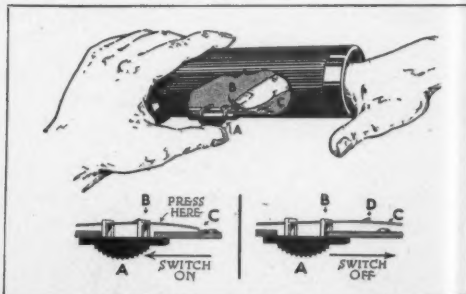
**"Built for Rough Treatment"**

The "Eveready" Industrial Flashlight is built for ROUGH treatment. The entire outer casing is made of heavy fibre reinforced inside by brass parts to help withstand severe service. The lens and lamp are protected by a special cushioning which softens the hardest impact. This flashlight has no exterior metal parts and it is completely insulated for working around "hot" wires, and therefore prevents shocks and short circuits. The casing will not dent and is not affected by oils, grease, gasoline, alcohol or other solvents and does not deteriorate with age.

The moulded slide switch is positive in operation and slides "on and off" easily. The whole assembly can be readily taken apart and put together without tools. Particles of grit cannot cause trouble.


**TO REMOVE:** Slide the switch "A" to the "on" position and hold it firmly against the tube with the thumb. Insert longest finger of right hand in tube and press brass contact strip "C" directly in front of lug "B". This pressure releases the latch and the strip will slide out.

**TO REPLACE:** Hold flashlight as shown and press the switch "A" in the "off" position, holding it firmly against the tube. Insert brass contact strip "C" with the small raised latch piece "D" on the top. Push it through the slot in the first lug "B". Press down on the slide to flatten the "bow". This pressure will lift the end so it may be pushed in through the second lug. Continue to push forward until a distinct click is heard. Then the switch is latched and properly assembled.



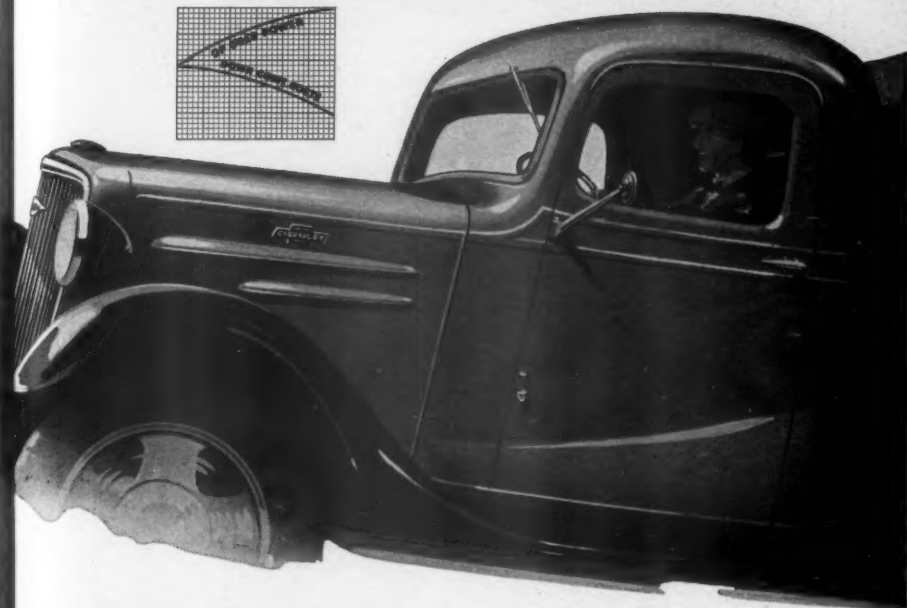
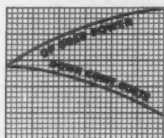
**NATIONAL CARBON COMPANY, INC.**

General Offices: New York, N. Y. • Branches: Chicago, San Francisco

Unit of Union Carbide  and Carbon Corporation



# NEW PERFECTED HYDRAULIC BRAKES NOW SAVE YOU EXTRA DOLLARS IN CHEVROLET TRUCKS



**New Chevrolet Truck Features Cut Haulage Costs to  
New Low Levels. Let an Actual Demonstration Prove It!**

## NEW PERFECTED HYDRAULIC BRAKES

Always equalized for quick, unswerving, "straight line" stops

## FULL-FLOATING REAR AXLE

With barrel type wheel bearings on 1½-ton models

## NEW FULL-TRIMMED DE LUXE CAB

With clear-vision instrument panel for safe control

## NEW HIGH-COMPRESSION VALVE- IN-HEAD ENGINE

With increased horsepower, increased torque, greater economy in gas and oil

FOR ECONOMICAL



TRANSPORTATION

Many new money-saving advancements have been engineered into these new Chevrolet trucks. The famous Chevrolet Valve-in-Head Engine now develops greater power . . . yet it uses less gas and oil. New Perfected Hydraulic Brakes are safer . . . and also more economical. Full-Trimmed De Luxe Cab and rugged, dependable, Full-Floating Rear Axle are other features which will win your approval. See these new trucks and learn how real truck economy can save you money in truck operation. CHEVROLET MOTOR COMPANY, DETROIT, MICH.

**POWER • ECONOMY • DEPENDABILITY • LONG LIFE**

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



# KINNEAR *Fire* SHUTTERS



## Concealed PROTECTION For Windows

Unprotected windows present your greatest fire hazard. They provide easy entrance of flames from neighboring buildings and the lapping of flames from one floor to another, making all other precautions inadequate. Kinnear Steel Rolling Fire Shutters are the reliable answer to this problem . . . as many Utilities have already realized. A fire resisting steel curtain concealed in the window casing; coiled on a barrel and equipped with mechanism that causes it to close **AUTOMATICALLY** and **POSITIVELY** in case of fire. A fire guard that's on the job continuously. Many cases can be cited where Kinnear equipped buildings have been saved from tremendous loss. Let us tell you more about the Kinnear form of **FIRE PROTECTION**.

Offices and Agents in All Principal Cities

**The KINNEAR MANUFACTURING COMPANY**  
2060-80 FIELDS AVENUE COLUMBUS, OH

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*

# SUPER-DREDNAUT *DEEP CURVE* LENSES

PROVIDE

*Added Protection..*

## THIS DEEP CURVE

1. Compels the Glancing Blow
2. Supports the Heavy Blow as does the arch in a bridge.
3. Prevents the glass from being driven into the eyes if lens should break by a terrific blow.



## ONLY SUPER-DREDNAUT GOGGLES EMBODY All 3 of the Following Features:

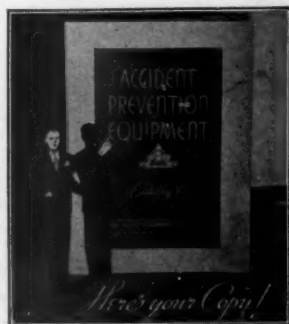
Self-Adjusting nose bridge, which automatically adjusts itself comfortably to any width or size of nose.

Non-Rubber headband, which contains no rubber, yet when properly adjusted it will maintain the desired tension and stay adjusted indefinitely. It cannot be injured by over-

extension and is not affected by moisture, perspiration, oil or grease.

Super-Drednaut lenses, DEEP CURVED for ADDED STRENGTH have proven through tests, long wear and hard usage that they provide a greater strength, greater resistance to hard blows than any other form of lenses, which means MAXIMUM eye protection and fewer eye injuries.

Send for a pair of Super-Drednaut Goggles TODAY and put them to the test.



## THE SAFETY EQUIPMENT SERVICE CO.

Buell W. Nutt, President :: 1230 St. Clair Avenue, Cleveland, Ohio

*Manufacturers of a Complete Line of Accident-Prevention Equipment*

## Style Bar-S All Weather Binder FOR METER READING



Write us for circular and details. Send sample of your sheet for prices on any quantity of binders.

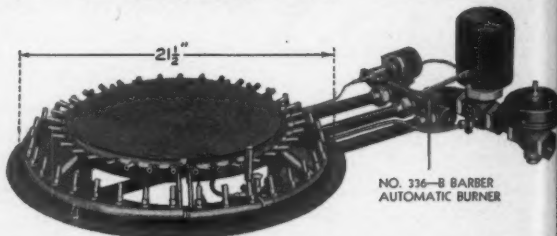
**GRAND RAPIDS LOOSE LEAF BINDER COMPANY**

10-16 Logan Street, S. W.

GRAND RAPIDS, MICH.

## Why BARBER BURNERS are the Outstanding Conversion BURNERS

FOR 18 years Barber Burners have set the standard, the country over, for Conversion Burner reliability. Why is this a fact? Because Barber Automatic Burners mean, from the User's standpoint, *sensible* fuel bills and *trouble-free* service, year in and year out. To the Heating Trade, they mean *easier* installation and *minimum* servicing. To Gas Companies they stand for *satisfied customers*, fewer removals,—and therefore a **PREFERRED BURNER** on time payment sales.



- "Tailor-made" to suit and fit the grate dimensions of round oblong furnaces or boilers.
- Insures a "scrubbing" flame action on side walls of firebox, the proper level, with 1900° Fahrenheit flame temperature. No brick or refractory elements needed.
- Furnished with Klixon or Baltimore Safety Pilot Control—positive and accurate. Listed in the A. G. A. Directory of Approved Appliances.

We supply Sales Literature, Specification Data Sheets and Practical Sales Assistance. Write for Latest Illustrated Catalog No. 37 and Revised Price List.

**THE BARBER GAS BURNER COMPANY**  
3704 SUPERIOR AVENUE, CLEVELAND, OHIO

**BARBER Automatic JET GAS BURNERS**

For Warm Air Furnaces, Steam and Hot Water Boilers and Other Appliances

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

This



The careful investor judges a security by the history of its performance.

# KERITE

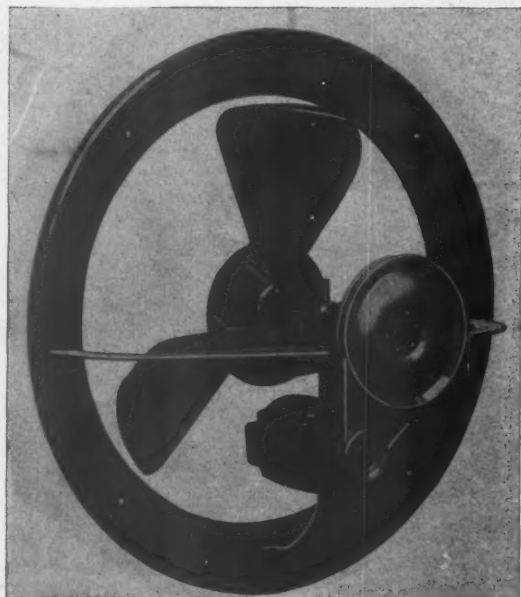
in three-quarters of a century of continuous production, has established a record of performance that is unequalled in the history of insulated wires and cables.

Kerite is a seasoned security.



THE KERITE INSULATED WIRE & CABLE COMPANY INC.  
NEW YORK CHICAGO SAN FRANCISCO

# Build your residential night load with BREEZ-AIR Fans



Here's a home accessory that sells easily, is very satisfactory to the user and helps to build the off-peak load of the power company.

It's the big, new BREEZ-AIR Attic Cooling Fan, a fan designed specially for hot weather cooling service. It's made in three sizes, 30-, 36- and 42-inch diameters and it handles plenty of air—up to 10,000 c. f. m.

## QUIET, Large Capacity Fans at new Low Prices.

Designed for a mass market, the new BREEZ-AIR Fans are priced unusually low—with a substantial profit for distributors and dealers. Write for Bulletin 3010

**BUFFALO FORGE COMPANY**

**444 Broadway, Buffalo, N. Y.**

*In Canada: Canadian Blower & Forge Co., Ltd., Kitchener, Ont.*

# BREEZ-AIR is best for Attic COOLING

# This chain of high-speed Relays

- 
- 1 RAISES STABILITY LIMITS
  - 2 MINIMIZES LINE DAMAGE
  - 3 SAFEGUARDS APPARATUS

● With the addition of the new Type HX Reactance Relay, the Westinghouse chain of high-speed relays assures a degree of protection never before available for high-voltage lines and connected apparatus. The HX is designed for protection against ground faults. It works equally well on single lines, closed loops, or parallel lines.

## OUTSTANDING HX ADVANTAGES

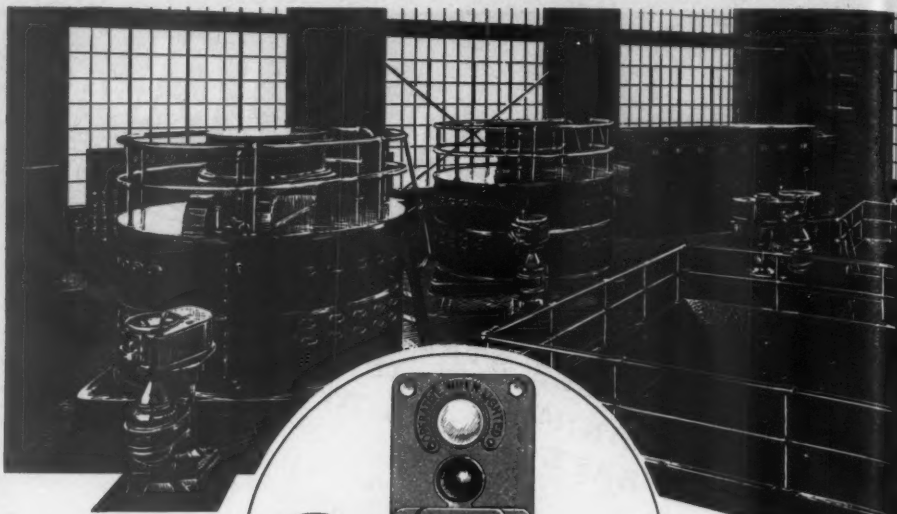
1. Accurate distance measurement on ground faults.
2. Relay setting independent of fault resistance.
3. Relay characteristics or zone of protection unaffected by mutual induction from parallel lines.
4. High-speed operation.
5. High-speed elements of simple construction similar to the type used in HZ relays.

For a detailed description of the HX Relay and the theory behind it, ask for a copy of C.S. 41-425. Room 5-N, East Pittsburgh, Pa. J 40022

# Westinghouse







## For SURE *Centralized* VALVE CONTROL

Step up the efficiency, lower the operating costs of your new projects, by giving them *centralized* finger-tip valve control.

With Chapman Motor Units one man can control every key valve in an entire plant, pumping station or city-wide water system—from a single electrical control board.

Chapman Motor Units provide safe, sure remote valve control. Their powerful, slow-speed motors are fully protected in case the valve jams. They have few parts . . . are substantial, weatherproof, steam-tight . . . can be furnished for completely submerged

operation. Lights at push button stations indicate whether a valve is opened, closed or position for hand operation.

takes but a second to shift a valve from motor to manual operation—and a man can easily open or close the valve even under full pressure on one side of the gate.

Valves already in service can be readily equipped with Chapman Motor Units without removal from the line. In modernization or new construction, specify them on all large valves and sluice gates. Bulletin for the asking. Send for your copy today.

# CHAPMAN

THE CHAPMAN VALVE MANUFACTURING CO. Indian Orchard, Mass.

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



# ALWAYS QUICKEST IN SEPARATION

*Gargoyle DTE Oils  
retain this ability  
for 10, 20 and even  
30 thousand hours!*



**SOCONY-VACUUM OIL COMPANY, INC.**

STANDARD OIL OF NEW YORK DIVISION - WHITE STAR DIVISION - LUBRITE  
DIVISION - WHITE EAGLE DIVISION - WADHAMS OIL COMPANY - MAGNOLIA  
PETROLEUM COMPANY - GENERAL PETROLEUM CORPORATION OF CALIFORNIA

## BOILER SAFETY BOILER SAFETY BOILER SAFETY

Bring **HIGH** Water  
Gages

**DOWN**

↓ where you  
can see them ... with the  
**Reliance PERISCOPE**

● No more uncertain reading of lofty water gages . . . no climbing to see water levels.

With a Reliance PERISCOPE you look at a clear reflection of the gage at eye height, in the mirror mounted on the floor stand.

The metal hood on the gage has a high grade mirror mounted in the inclined front, which transmits the image to the floor stand mirror below. Special and efficient illumination is provided. Fits tubular glass, prismatic, flat glass or Micasight gages.

The Reliance PERISCOPE is permanent, trouble-free, easily cleaned—and moderate in cost. Write for descriptive folder.



The Reliance Gauge Column Co.  
5930 Carnegie Avenue  
Cleveland, Ohio

# Reliance

WATER COLUMN HEADQUARTERS

## STEEL or ALUMINUM Outdoor Polyphase Meter Cabinets



With sealable weatherproof opening for resetting demand attachments or plain reading window. Pole or wall mounting. Any desired arrangement of threaded hubs or knockouts or both.

Send for New Catalog Today

**WALKER ELECTRICAL COMPANY**  
ATLANTA GEORGIA

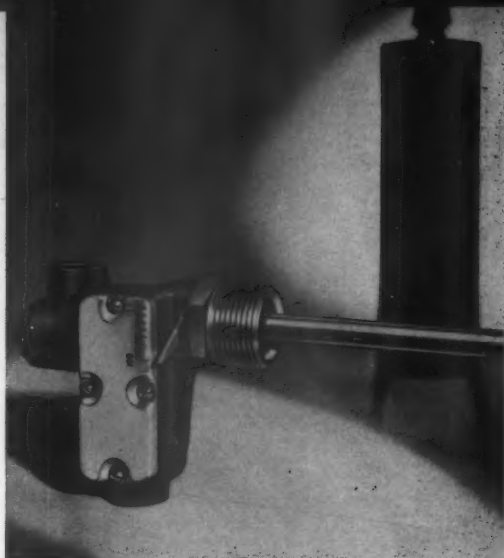
## ACCURACY

In the efficient operation of water or sewage treatment works, it is of utmost importance that a definite and **ACCURATE** knowledge of flow conditions be known.

**SIMPLEX VENTURI TYPE METERS**, because of their **SENSITIVITY** and **ACCURATE RESPONSE** to flow variations over a wide range, will meet your most exacting flow measuring requirements.

Let **SIMPLEX ENGINEERS** help YOU.

**SIMPLEX VALVE & METER CO.**  
6761 Upland St., Philadelphia, Pa.



## As Is Your Thermostat, So Is Your Storage Heater

You will agree that the success of an automatic storage heater depends in large measure upon the performance of its thermostat. Look well, therefore, to that angle.

Your aim is to increase consumer satisfaction. That means, in the present instance, a thermostat upon which the user can depend at all times—which reduces your servicing to a negligible minimum—which consis-

tently builds good will for you in your community.

The Titan Snap Action Thermostat fulfils these requirements. It is known for its universal reliability even under the most severe conditions. Titans are already standard equipment on most storage heaters approved by the American Gas Association. Their enviable record warrants your complete confidence.

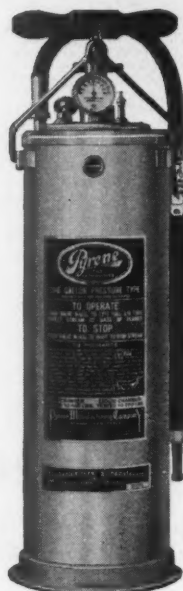
**THE TITAN VALVE & MANUFACTURING COMPANY**  
THERMOSTATS "» SAFETY PILOTS "» RELIEF VALVES  
3205 Perkins Avenue Cleveland, Ohio

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*

# TITAN

## WATER HEATER CONTROLS

**Pressure Type  
1-Gallon  
Fire  
Extinguisher**



**easy operation  
rapid discharge  
long range  
large capacity**

Here is the big brother that comes to the rescue of the little fellow when he's trying to handle something beyond his capacity.

Wherever there are big buses, trucks, gasoline pumps, electric locomotives, transformers, panel boards, and large rotary units, this one-gallon pressure-operated Pyrene extinguisher offers greater protection.

Speed and force of application are important in fire fighting. Give the valve of this extinguisher a quarter turn and a strong stream discharges one gallon of vaporizing liquid in 55 seconds.

Make sure that you have enough Pyrene one-gallon extinguishers to back up your smaller equipment. Write for folder No. 22.

**Pyrene Manufacturing Company**  
NEWARK NEW JERSEY

ATLANTA  
KANSAS CITY



CHICAGO  
SAN FRANCISCO



# STOWE STOKERS are doing things

● Stowe Stokers with their compensating feed—positive rear end air seals—unrestricted fuel selection—and much reduced ash pit losses—are demonstrating their superiority—give highest overall efficiencies on any coal. Customers are placing repeat orders. Investigate the advantages that only Stowe Stokers can give you. Full details on request.

**THE JOHNSTON & JENNINGS CO.**  
977 Addison Road  
Engineering and Sales Services in the Principal Cities

Cleveland, Ohio

Stowe Stokers give you greatest possible control over fluctuating coal prices.

Catalog No. 10 is complete with 14 diagrams—20 illustrations. Send for one.



# STOWE STOKERS

★ *Compensating Feed*

## CONNELLY REGULATORS for APPLIANCES

60th Anniversary  
1876-1936



Regulators for Pilots, Refrigerators, Ranges and all Appliances.

The Connelly Jr. (upper left) is made in 1/4" size only—compact, simple and sensitive for small capacities.

Connelly Type DCE—Spring Loaded and Type DCW—Weight Loaded—are designed for long service with a minimum of maintenance. They are rugged; simple and direct acting; occupy small space and give accurate control.

### CONNELLY IRON SPONGE & GOVERNOR COMPANY

Chicago, Illinois - 3154 South California Ave.  
Elizabeth, N. J. - 200 South Second Street  
N. E. Agt.; Theo. H. Piser - Waban, Mass.

## A THOUSAND TIMES

NO

set screw contact ...  
flattening or separating of wires ...  
special tools required to make connection ...  
Limitation to one size wire ...  
costly castings or forgings ...  
shearing effect whatsoever ...  
need for you to search any longer for the PERFECT Solderless Connector—we have it!

Address Dept. UF,  
**ILSCO COPPER TUBE & PRODUCTS, INC.**

5629 Madison Road, Cincinnati, Ohio

FREE—A large display board, containing mounted samples of ILSCO lugs. Sent upon request.





No. 110 Niagara Gas Air Conditioning Unit, available in a full range of sizes for residences.

## NIAGARAS WILL INCREASE AND MAINTAIN YOUR LOAD

Utility companies find in Niagara Gas Furnaces and Air Conditioning Units every modern feature plus three important particular advantages.

1. *High efficiency.* . Tests conducted by the research departments of public utilities show an exceptionally high ratio. This is achieved by Niagara's thermo-syphon and counter-flow system of heat extraction, which transfers a very large percentage of heat from the burned gases to the circulating air.

2. *Elimination of superfluous controls.* . Niagara's central burner combustion chamber is responsible. Only one

safety pilot is required for Niagara Gas-fired Furnaces in ordinary residences.

3. *Conservation of floor space.* . Note the simple, self-contained design. The upper compartment holds the heat-generating equipment, radiating sections, gas burners and automatic humidifier. The lower compartment contains the blower and filter equipment and the electrical controls.

You many depend upon Niagaras to increase and maintain your load. Shall we send a complete catalog?

**THE FOREST CITY FOUNDRIES COMPANY**  
2500 West 27th Street Cleveland, Ohio

# NIAGARA GAS

## AIR CONDITIONING UNITS

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*



# THEY NEVER SAW A TYPEWRITER PLANT



... but they know that  
**ROYAL**  
means Better Letters  
at Lower Cost

The test of a typewriter is the typewriter itself and the typing it does!

You'll realize it—the instant you try a New Easy-Writing Royal and . . . Compare the Work!

Letter-perfect! Even to the final carbon copy! Sentences, paragraphs, pages—free from the erasures and corrections that handicap typists, that retard the quick completion of their assignments!

*Time gained, money saved!*

Royals are right—year after year—*always!* And executives and operators know it! That is why Royal sales are greater now than ever before!

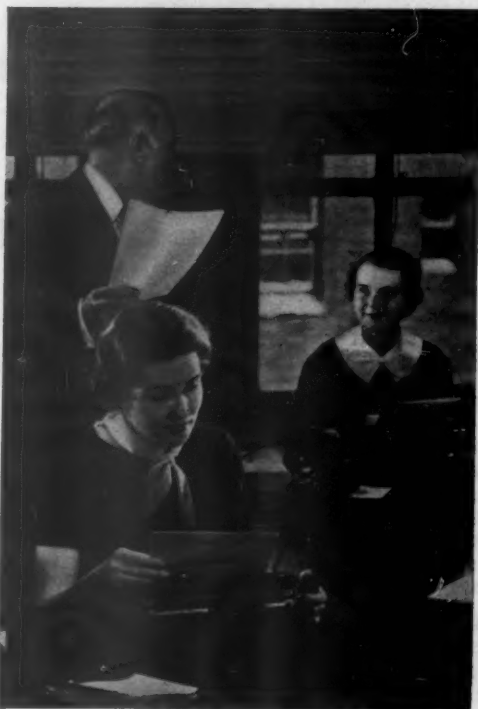
Invite a demonstration!  
Know why Royal is World's No. 1 Typewriter!

**ROYAL TYPEWRITER  
COMPANY, INC.**

2 Park Ave., New York City

Branches and Agencies throughout  
the World

*\*Trade-mark for key-tension device.*



Copyright, 1936, Royal Typewriter Company, Inc.



**FIRSTS that make ROYAL  
FIRST!**

**SPEED**—Greater volume! **EASE**—With Touch Control,\* Shift Freedom, and many other exclusive features! **CAPACITY!** Greater speed, greater output! **ECONOMY**—Lower costs throughout! And **DURABILITY**—Longer life!

**WORLD'S**

## New Easy-Writing ROYAL

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*

# RIGID Hollow Screws Eliminate Curb Box Hazards



## Broken Screws Can Be Replaced Immediately By Your Inspector

**P**REVENT delays and damage suits and cut costs of maintaining covers on your curb boxes by replacing old type solid screws with new **RIGID** Hollow Forged Screws. Require only a **RIGID** "LONGRIP" Extractor to remove broken ends. Your inspectors can readily recap the box and the hazard is ended.

Unlike solid broken screw ends that require calling out a repair truck, **RIGID** Hollow Screw equipped boxes can be recapped immediately. No delay—and delays cost money for lost covers, cleaning out, etc., and invite costly damage suits.

Your maintenance costs will quickly prove that it's wise economy to have a supply of **RIGID** Hollow Screws and "LONGRIP" Extractors on hand. Write for complete information.



### THE **RIGID** **LongRIP** Service-Box Cover-Screw EXTRACTOR

is designed especially for use with the **RIGID** Service Box Screw. A sturdy tool of heat-treated steel, practically indestructible. Six precision flutes positively engage broken screw end without slipping, spreading or wedging.



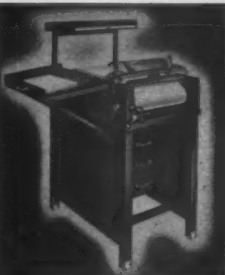
THE RIDGE TOOL CO., Elyria, O.

# RIGID

REG. U. S. PAT. OFF.

## PIPE TOOLS

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



## THERE IS A DITTO DUPLICATOR THAT WILL SAVE TIME AND MONEY FOR YOU

For years Public Utility Companies have used Ditto Duplicators for scores of daily duplicating tasks. Copies of financial reports, rate schedules, specifications, engineering drawings, service orders, factory orders and many other jobs are made on Ditto at the lowest possible cost and with the greatest speed.

Because Ditto provides a duplicating machine for every need—from small inexpensive duplicators to large heavy duty equipment—you will find just the right machine for your purpose at price commensurate with your work and the savings you can make.



**Ditto**  
INCORPORATED  
284 W. HARRISON ST.  
CHICAGO, ILLINOIS



DITTO, Inc., Chicago

Gentlemen:—Please send me your new book "Copies—Their Place in Business" telling what Ditto is and what it does. No cost or obligation.

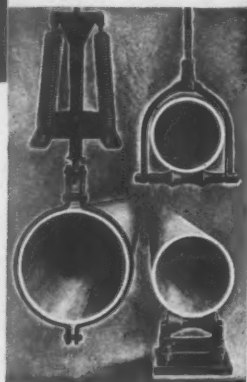
Name .....  
Concern .....  
Address .....  
City ..... State .....

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

# Interpreting

THE IDEAS  
AND PLANS  
OF ENGINEERS

● Hang Any Piping in Any Place with Grinnell Adjustable Pipe Hangers and Supports.



SEND FOR COPY DATA AND SPECIFICATION BOOK No. 7

Prefabrication offers possibilities for substantial economies in complicated piping assemblies.

Successful pipe fabrication demands not only adequate equipment itself but, even more important, the ability to interpret faithfully the ideas and plans of engineers.

The recognized ability of Grinnell to interpret intricate layouts and to make scheduled deliveries for the most complicated installations is particularly well expressed by the often repeated statement from engineers: "Give the plans to Grinnell if you want to meet schedules."

**GRINNELL COMPANY**  
EXECUTIVE OFFICES PROVIDENCE, R. I.  
Branch Offices in Principal Cities

# GRINNELL

FABRICATED PIPING AND ALLIED PRODUCTS TO GRINNELL LABORATORY STANDARDS

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

This

# *1½ Million more Frigidaires*

*have been sold than any other make!*

● Frigidaire's tremendous margin of leadership is positive proof of greater public acceptance than ever awarded any refrigerator. Frigidaire is decidedly the first choice of the buying public.

Viewed from a utility standpoint, Frigidaire's leadership discloses several significant facts. For instance, Frigidaire's outstanding sales success has materially aided utilities in the promotion of their own load-building plans to increase overall revenue.

Moreover, Frigidaire has added load to utility lines without jeopardizing relations between customer and utility. Customer satisfaction with Frigidaire performance minimizes any possibility of complaint that service bills are higher.

The utilities that are participating in Frigidaire's record-breaking sales accomplishment are profiting through greater sales volume, added load and increased customer goodwill.

FRIGIDAIRE CORPORATION · DAYTON, OHIO



# Exide

## BATTERIES

—choice of transit systems and bus lines whose policies permit no compromise with quality « «

It is significant that Exide Batteries are used by so many of the country's successful transit and bus lines.

It is not to be implied, of course, that their success is dependent upon their use of Exides. But the operating company that is so meticulous in the choice of its batteries will naturally gauge the selection of all its equipment by the same high standards . . . and the traveling public appreciates the attention paid their comfort and safety.

### THE ELECTRIC STORAGE BATTERY COMPANY

*The World's Largest Manufacturers of Storage Batteries for Every Purpose*  
PHILADELPHIA

## KLEIN



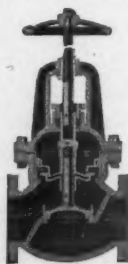
## BELTS

Where life depends on a strap or belt of leather no compromise can be made with quality. Klein's leather is first quality, selected for its strength and durability, and checked for chemical analysis and tensile strength. All hardware is drop forged from bar steel, individually tested to 1500 lbs. Stitching is done with hot waxed genuine Irish linen thread, lock stitched. Riveting by hand with solid copper rivets reinforces all necessary parts. Standard of quality with linemen and safety engineers everywhere.

Mathias **KLEIN** & Sons  
Established 1857 Chicago, Ill. U.S.A.

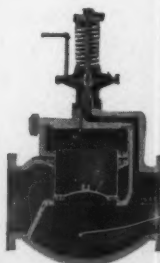
## PLANT SAFETY

### WITH GOLDEN-ANDERSON AUTOMATIC VALVES



Perfect water level control assured by the Altitude Control Valve . . . the most efficient and dependable automatic valve for tanks, standpipes and reservoirs.

Safety Stop Non-Return valves protect lives and property, automatically, against live steam flows due to boiler ruptures or steam line breaks.



Ask for your copy of catalog for our complete line of automatic control valves

Golden-Anderson Valve Specialty Co.  
1380 Fulton Bldg. Pittsburgh, Pa.



# EXIT the big figuring machine that sat in the corner



MONROE ADDING-CALCULATOR, MODEL LA-6-C

# ENTER the convenient Monroe that sits on your desk and takes no more room than a letter

Twenty-four years ago the first Monroe was made and sold. It was then the simplest machine ever made for business figuring. Year by year it has been refined and simplified until today you have this desk-size Monroe with "Velvet Touch" keyboard. It weighs only about 16 pounds. It adds, subtracts, multiplies, and divides instantly and automatically. Small wonder that Monroe is the predominant calculating machine throughout American business.

Building on this wealth of experience, Monroe now offers some 197 models: calculators, listers, bookkeeping machines, and

check writers—all compact, all desk-size, all with the famous "Velvet Touch" keyboard that takes the strain and stress out of figuring. A call to the nearest Monroe branch or a letter to the factory will put a Monroe to work on your own figures. No obligation of course.

Just off the press, handsome booklet, "If Only I Could Work On Your Desk For An Hour." Send for free copy to MONROE CALCULATING MACHINE CO., INC. ORANGE, NEW JERSEY.



This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

1936

CAPITAL AND SURPLUS

\$5,000,000

GROWTH

THAT

DEMANDS

RECOGNITION

The first Hygrade Lamps were manufactured in 1901. The capitalization of the company was \$3500. Hygrade Lamps entered the market in competition with bulbs produced by the largest manufacturers of electrical equipment in the world. Yet, by the sheer power of their fine quality, they have steadily forced growing recognition of their merits until today demand for them has reached a volume that is the third largest in the country—and the company's capital and surplus is over five million dollars.

A big company—a big name. A concern whose record and product must command respect—and consideration in your scheme. A story of the facts behind such tremendous growth must be worth listening to. It's a story that offers economies as well as quality, a story that is interesting more and more important utilities—particularly on street lighting. A story you ought to know. Ask us to give it to you.

HYGRADE SYLVANIA CORPORATION, SALEM, MASSACHUSETTS

HYGRADE LAMP

Manufacturers of incandescent lamps for over 30 years.  
Makers of Sylvania Six-tested Radio Tubes

1901

CAPITALIZATION  
\$3500SPECIALISTS IN  
STREET LAMPS

© 1936, Hygrade Sylvania Corp.

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

# To users of Gelatin or Spirit DUPLICATING MACHINES

**100 SHEETS OF  
HAMMERMILL  
DUPLICATOR**

(WATERMARKED)

**FREE**

If your business uses a duplicating machine, either the familiar gelatin type or the newer spirit type, you may be able to effect a saving on paper—and have better-looking copies in the bargain. It takes only two minutes to find out. Compare your present duplicator paper with the qualities of Hammermill Duplicator—perfected after years of painstaking research under commercial conditions.

Can your present paper be used on *either* gelatin type or spirit type duplicating machines? *Hammermill Duplicator can.*

On gelatin machines, do copies get fainter as they run progresses? *Hammermill Duplicator produces copies approximately equal in intensity—with no rapid fading out as the run progresses. There is no excessive absorption of ink into the paper—the chief cause of fading.*

On the spirit duplicator, does your present paper require much or little fluid? *Hammermill Duplicator gives brilliant copies with minimum of fluid . . . so it reduces fluid expense, avoids blurring, reduces curling.*

Who makes it? *Hammermill Duplicator (watermarked) is made by the makers of Hammermill Bond.*

Hammermill Duplicator Paper is available from your printer or stationer in white, blue, buff, pink and salmon, colors that match Hammermill Bond and Hammermill Bond Envelopes.

**100 SHEETS . . . FREE . . .** if you will send us a sample of your present duplicator work—in return we'll mail you *Free* a 100-sheet Test Packet of Hammermill Duplicator Paper. Please attach coupon to your business letterhead.

*If you prefer, omit coupon and simply write us on your letterhead*

**HAMMERMILL  
DUPLICATOR**

(WATERMARKED)

Hammermill Paper Co., Erie, Pa.

Gentlemen: Please send me *Free* a 100-sheet Test Packet of Hammermill Duplicator Paper.

Name \_\_\_\_\_

Position \_\_\_\_\_

Check type of machine used ☐ Gelatin  
☐ Spirit

(Please attach coupon to your business letterhead)

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*

# Better Lighting *makes Better Store Fronts*



**T**HAT's why the Pittsburgh Plate Glass Company recommends to every purchaser of a Pittco Store Front the installation of adequate lighting facilities at the time the store front is built. We believe that close coöperation between the Pittsburgh Plate Glass Company and the Public Utilities in this respect, results not only in better business for both, but in more efficient store fronts for the American merchant.

If you are not already familiar with the means used by our store front department to assist in swelling your load through the exchange of prospects, the maintaining of a store front design department, and the showing of films on the value of modern store fronts and proper lighting, we suggest that you contact the manager of our nearest branch warehouse, or write to us direct at Pittsburgh.

CARRARA STRUCTURAL GLASS	<b>PITTCO</b> STORE FRONTS <i>glass...metal...paint</i> PRODUCTS OF <b>Paint { PITTSBURGH } Glass</b> PLATE GLASS COMPANY	PITTSBURGH PAINT PRODUCTS
PITTCO STORE FRONT METAL		POLISHED PLATE GLASS
PITTSBURGH MIRRORS		TAPESTRY GLASS



*Clear*

## ... FLAWLESS GLASS with BRASS BUSHING—the IDEAL insulator

When you "line up" with  
HEMINGRAY you line up  
these Advantages:

1. Brass bushed smooth threads for insulator pin.
2. Greater mechanical strength.
3. Sustained high dielectric strength.
4. Unaffected by sudden temperature changes.
5. Withstand maximum insulator pin expansion.
6. Never age or deteriorate.
7. Controlled uniformity of product.
8. All surfaces impervious to moisture.
9. Tougher— withstand rough handling.
10. Clear and flawless for easy inspection.

● This rugged new Hemingray Glass Insulator stands up better in all adverse weather conditions. It's brass bushed, providing perfect threads for uniform contact with pin—permitting quick, full-length insertion—and safeguarding against pin expansion. Its many all-around advantages clearly point to the brass bushed Hemingray as the ideal insulator for low-cost distribution service. All styles in clear and brown color. Ratings up to 15,000 volts. Write for descriptive bulletin . . . Owens-Illinois Glass Company, Hemingray Division, Muncie, Ind.

**HEMINGRAY**  
*Glass*  
**INSULATORS**

# National

## Wires and Cables



Double Braid Rubber Covered Wire ★



Triple Braid Weatherproof Wire



Tree Wire ★



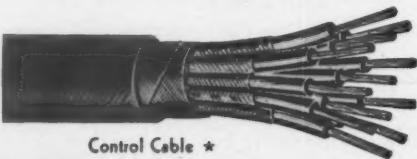
Indestructo Cords and Cables



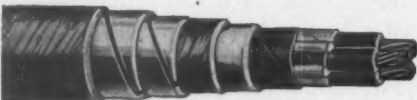
Service Entrance Cable ★



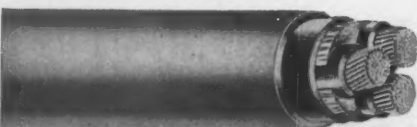
Asbestos-Varnished Cambric Cable



Control Cable ★



Flexlay (Parkway) Cable



Varnished Cambric Wires and Cables

**BUILT TO DOMINATE  
BY REASON OF  
QUALITY**

HIGHEST QUALITY RAW MATERIALS FABRICATED UNDER THE MOST EFFICIENT TECHNICAL SUPERVISION. NATIONAL WIRES AND CABLES ARE OUTSTANDING FOR THEIR PERFORMANCE AND LONG LIFE. ONLY THE BEST OF THE BEST IS GOOD ENOUGH FOR NATIONAL.

★ WITH SAFECOTE "FIRE-STOP" FINISH. PROTECTED AGAINST MOISTURE, AIR, LIGHT, AND HEAT. HERMETICALLY SEALED AGAINST THOSE AGENTS WHICH TEND TO DESTROY THEM. FLAME RETARDING.





**National Electric**  
PRODUCTS CORPORATION  
Pittsburgh, Pa.

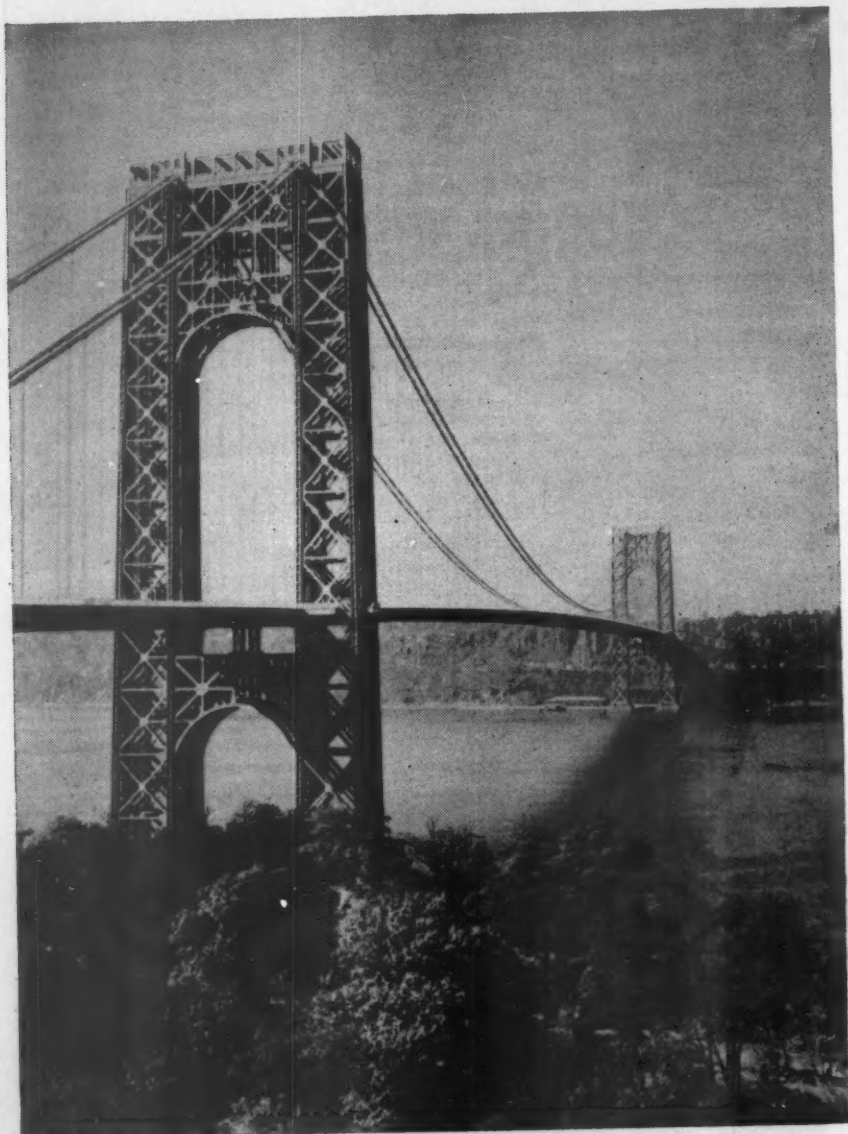




# Utilities Almanack

J U L Y

2	Th	¶ Union of Canadian Municipalities will hold annual convention, Vancouver, B. C., July 27-29, 1936.
3	F	¶ American Society for Testing Materials concludes meeting, Atlantic City, N. J., 1936.
4	Sa	¶ League of Iowa Municipalities will convene for annual session, Davenport, Iowa, August 18-20, 1936. 
5	S	¶ American Bar Association will hold annual convention, Boston, Mass., week of August 24th, 1936.
6	M	¶ Michigan Gas Association and Michigan Electric Light Association begin joint convention, Mackinac Island, Mich., 1936.
7	Tu	¶ American Water Works Association, Central States Section, will convene, Cleveland, Ohio, August 19-21, 1936.
8	W	¶ Canadian Gas Association opens 29th annual convention, Vancouver, B. C., 1936. ¶ Pacific Coast Gas Association starts Northwest Conference, Vancouver, B. C., 1936.
9	Th	¶ Mid-West Shippers Advisory Board convenes, Green Bay, Wisconsin, 1936.
10	F	¶ Union of Nova Scotia Municipalities will hold annual convention, Digby, Nova Scotia, September 2-4, 1936.
11	Sa	¶ Illuminating Engineering Society will hold annual meeting, Buffalo, N. Y., August 31-September 3, 1936. 
12	S	¶ Third World Power Conference will convene, Washington, D. C., September 7-12, 1936.
13	M	¶ International Association of Electrical Inspectors, Northwestern Section, will hold convention, Olympia, Wash., September 14-16, 1936.
14	Tu	¶ American Transit Association and affiliated organizations will hold annual convention, White Sulphur Springs, W. Va., September 21-24, 1936.
15	W	¶ League of South Dakota Municipalities starts meeting, Rapid City, S. D., 1936. ¶ American Society of Civil Engineers opens convention, Portland, Ore., 1936.



*Photo by Underwood & Underwood*

## George Washington Bridge

Vo

V  
of  
gre  
ene  
sta  
the  
ver  
con  
thi  
wh

gre  
19  
era

# Public Utilities

FORTNIGHTLY

VOL. XVIII; No. 1



JULY 2, 1936

## The Power Act of 1935

What coöperation with its policy  
would mean to public utilities

THE act is not destructive of private initiative in the opinion of the author but on the contrary encourages the members of the electric industry to bring about a more economic coördination of facilities and resources for the benefit of all.

By OSWALD RYAN

GENERAL COUNSEL, FEDERAL POWER COMMISSION

**W**HEN the state of Missouri, a decade and a half ago, challenged, in the Supreme Court of the United States, an act of Congress as an unconstitutional interference with the reserved rights of the state under the Tenth Amendment of the Federal Constitution, Justice Oliver Wendell Holmes, speaking for the court, said: "We must consider what this country has become in deciding what that amendment has reserved."

Apparently the adoption by Congress of the Federal Power Act of 1935<sup>1</sup> was predicated upon a consideration of "what this country had be-

come" in the field of electric power. The act's declaration that Federal regulation of electricity in interstate commerce had become necessary in the public interest constitutes the first congressional recognition of the transformation of the power industry from an industry of a purely local nature to one of a dual local and national character.

Before Congress lay the new national power map, born of the amazing development in the technical arts which had taken place in the short span of the two preceding decades. That map showed more than 160,000

## PUBLIC UTILITIES FORTNIGHTLY

miles of high-tension transmission lines spreading in a network across state boundaries. Over those lines in 1933 17.8 per cent of all the electricity generated in the country had journeyed in interstate transmission—an amount greater than that which was generated in the entire United States only a little more than two decades before. Taught by the genius of engineers, inventors, and scientific men, electric energy had acquired a serene disregard for the political boundaries of sovereign states.

WHAT had become of the local isolated plant which generated and distributed electric energy in the local community? Not always, but often enough to make the matter a subject of national concern, those plants had, in large part, been swallowed up by the great interstate power systems with their huge generating stations that poured electric energy into vast networks, transcending the boundaries of individual states.

Here, then, was a new and rapidly growing industry of an interstate character. The distribution of electricity to the factory, home, and farm was still a local business; but not so with a large part of generation and transmission. The supply of the energy distributed locally was now traceable in many instances to the huge generating and transmission networks that lay beyond the borders of any one state. "What this country had become" in the matter of electrical generation and transmission was not what it had been within the personal memory of those who composed the Seventy-fourth Congress.

Such was the picture which was

unfolded before the Congress which was considering this power problem. Here was a new industry which had appeared in interstate commerce; an industry which has recently been transformed from one of a purely local character into an industry which was still local in some aspects but had now become regional and national in other important aspects. Out of this change had come problems of vital social and economic concern, both to state and nation. The state was no longer able adequately to regulate utilities whose operations had expanded beyond the jurisdiction of the state; and since Congress had provided no regulation, a gap had appeared in public regulation, a twilight zone in which interstate activities of profound significance to the public were carried on without the restraint of any public regulatory control.

So ran the argument which was presented to the Seventy-fourth Congress by the proponents of the new power act. That act may be properly interpreted as a means provided for meeting the problems born of the new situation.

The Power Act of 1935 seeks to close up the gap in public regulation of the electric industry. To that end it subjects to the regulatory control of the Federal Power Commission electricity in interstate commerce.<sup>3</sup> It also subjects to the commission's control the export of electricity from the United States to foreign countries.<sup>4</sup> (Curiously enough, no jurisdiction is asserted over the importation of power into the United States.) The persons who own or operate either interstate transmission facilities or facili-

## THE POWER ACT OF 1935

ties for the sale at wholesale of electric energy in interstate commerce are made subject to the commission's regulatory jurisdiction.<sup>4</sup>

There are approximately 1,600 privately owned electric utilities in the United States which produce 96 per cent of all the power that is generated. Of the capital assets of these companies, totalling more than seventeen billions of dollars, approximately twelve and one-half billions represents investments in electrical properties. The Federal Power Act probably affects 60 per cent of these twelve and one-half billions of dollars of capital assets.

THE character and extent of the jurisdiction asserted over electricity in interstate commerce may be seen in the act's provisions granting the commission authority to fix the rates at which electric energy is sold in interstate commerce at wholesale for resale;<sup>5</sup> provisions for commission control of interstate services;<sup>6</sup> provisions for commission control of the securities of interstate electric utilities where the company involved is not organized and operating in a state under the laws of which its security issues are regulated by the state commission;<sup>7</sup> provisions requiring the commission's approval of mergers, consolidations, and transfers of the property of interstate electric utilities and of acquisitions by

such utilities of the securities of other utilities of the same character;<sup>8</sup> provisions requiring commission approval of the holding of interlocking positions between interstate electric utilities or between such utilities and financial institutions which are authorized to underwrite or participate in the marketing of public utility securities, or between such utilities and companies supplying electrical equipment to them;<sup>9</sup> provisions requiring interstate electric utilities and licensees to keep uniform accounts and records and giving the commission control over the depreciation of public utilities' and licensees' property;<sup>10</sup> and provisions for the achievement of "an abundant supply of electric energy throughout the United States with the greatest possible economy and with regard to the proper utilization and conservation of natural resources."<sup>11</sup>

THE last-mentioned provision of the statute, which contemplates a planned coördination of the power resources and facilities of the country, deserves consideration as embodying one of the major and most significant objectives of the new law.

The principle of planning thus recognized had already received a limited application in the Federal Water Power Act of 1920 where the Federal Power Commission, in licensing hydroelectric projects subject to its ju-



"THE *Power Act of 1935 seeks to close up the gap in public regulation of the electric industry. To that end it subjects to the regulatory control of the Federal Power Commission electricity in interstate commerce. It also subjects to the commission's control the export of electricity from the United States to foreign countries.*"



## PUBLIC UTILITIES FORTNIGHTLY

isdiction, is authorized to require such projects to conform to the most economic and comprehensive plan for the utilization of the water resources of the region.<sup>12</sup> The 1935 addition to the Power Act involves in one respect a more restricted application of this principle of regional planning and, in another respect, a broader application. Thus the commission in Part II of the statute is given no control over the *location* of generating plants, even where they generate for interstate commerce, but is granted an important power over the coordination and interconnection of interstate facilities, whether hydroelectric or fuel generation is involved. The commission, under the Act of 1920 (now Part I of the Federal Power Act), thus exercises some control over the location of licensed hydroelectric facilities, but in exercising its power under the Act of 1935 over the coordination of interstate facilities it must deal with the power map as it finds it, except in so far as it may be able to effect power development through the persuasive method of voluntary coordination.<sup>13</sup>

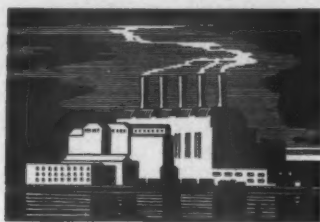
**I**N the adoption of this policy of coordination Congress was undoubtedly influenced by the many governmental reports which were before it. Among these was the Keller report on the power situation during the war which, published by the War Department in 1921, pointed out great possibilities that might be expected from "capacious interconnections between adjacent power systems," which would take advantage of the diversity factor and release for active use instant reserves. Another was the comprehensive and adequate survey which

was conducted by W. S. Murray and other distinguished engineers of the industry and which appeared in 1921 under the auspices of the Department. Mr. Murray and his associates, speaking in 1921, thought that the power needs for 1930 could be supplied by a coordinated system at an annual saving of \$239,000,000 over the cost of the uncoordinated system then in use.<sup>14</sup> Still another witness to which Congress gave ear was the Northeastern Super Power Committee, of which Herbert Hoover was the chairman. That committee, in May, 1924, declared that the economical and adequate power supplies of the area of northeastern United States required extension of interconnection between systems, large centralized steam electric plants located at strategic points and the development of a large hydroelectric project.

It is a significant fact bearing upon the value of planning for future requirements that the subsequent development of the private industry in this area, as to the location and interconnection of transmission lines and the location of large steam and hydroelectric plants, has followed substantially along the lines recommended by Mr. Hoover's committee, and that the committee forecast for power requirements for the year 1930, although made in 1924, has proved to be accurate within a fraction of one per cent.

**S**IMILAR testimony to the advantages of a coordinated power system was contained in the 1925 Report of the Giant Power Survey Board of Pennsylvania, the 1934 Report of the Power Authority of the State of New





### The Electric Industry's Opportunity

**"T**AKEN all in all, these coördination provisions of the new act constitute an invitation by the Federal government to private management and leadership to join in an enterprise of vital importance to both private and public interests. That enterprise is big with opportunity for the industry and public alike."

York, the 1934 Report of the Mississippi Valley Committee, and the Interim Report of the National Power Survey of the Federal Power Commission. Some of these reports asserted that uneconomic division of territory, wasteful overlapping of facilities and lack of engineering and economic unity had marked the uncontrolled expansion of power systems in the past.

The body of documentary evidence above referred to apparently convinced Congress that *public control of rates, alone and of itself, offers no assurance of an adequate supply of electricity at the lowest economic price; and that a proper organization of power facilities and resources in an economically integrated power system is essential.*

What means are provided for the attainment of the economic power map which is envisaged by the new law?

The Federal Power Commission is directed to divide the country into

regional districts for the voluntary interconnection and coördination of facilities for the generation, transmission, and sale of electric energy.<sup>18</sup> Such regional district is described by the statute as an "area which in the judgment of the commission can economically be served by such interconnected and coördinated facilities." Obviously, the "region" contemplated is that in which the generating and transmitting facilities can be most economically coördinated to secure the maximum use of water-power resources and maximum economy of fuel generating facilities, and at the same time secure the lowest possible cost of power on the transmission network and delivered at load centers. Such interconnection and coördination would not be affected by state lines or differences in corporate ownership.

**T**HE statute contemplates the accomplishment of interconnection and coördination of facilities within

## PUBLIC UTILITIES FORTNIGHTLY

such districts either by voluntary action of the companies themselves or by compulsory commission action. Compulsory orders, however, may issue only where, upon the plea of a state commission or any person engaged in the transmission or sale of electric energy, and after full opportunity for hearing, the commission finds such action necessary or appropriate in the public interest and that no enlargement of generating facilities would be required and that no impairment of adequate service would result.<sup>16</sup>

For further advancing the coördination process, the commission is granted authority over the transfers, mergers, and consolidations of facilities subject to its jurisdiction, as well as control of the purchase by public utilities of the securities of other public utilities.<sup>17</sup> Considerable savings in administrative expense may be expected from the merger and consolidation of properties authorized by the commission pursuant to the policy of coördination.

**T**HE commission is also authorized, during the continuance of any war, or whenever it determines that an emergency exists by reason of the sudden increased demand for electric energy or the shortage of electric energy, or of facilities for the generation and transmission of electric energy, or of fuel or water for generating purposes, or other causes, to require temporary connections and such generation, delivery, interchange, or transmission as, in its judgment, will best meet the emergency and serve the public interest. The commission fixes the terms of the arrangements for carrying out the order if the affected par-

ties fail to agree upon them. By § 202(d) persons who are not otherwise subject to the commission's jurisdiction may, during the continuance of any emergency requiring immediate action, make temporary connections with any public utility or construct temporary interstate facilities and may do this without subjecting themselves to commission jurisdiction. Such person may also, upon commission approval, make permanent connections for emergency use only. Already an application is pending before the commission for the authorization of a permanent connection under this section.<sup>18</sup>

As a still further means of advancing the coördination of facilities subject to the commission's jurisdiction and preserving the sufficiency of electrical supply within the United States, the commission, in § 202(e), is given control over the transmission of electric energy to foreign countries.

**U**PON the passage of the new Power Act, the commission immediately entered upon studies preliminary to the division of the United States into regional districts as provided in § 202(a). Also, it has passed upon a number of applications for merger, consolidation, and disposition of facilities in each of which its decision has been made with careful reference to the purpose of the act to accomplish proper coördination of power facilities and resources.<sup>19</sup> A number of additional merger cases are pending before the commission at the present writing.

A careful analysis of the above provisions for coördination should lay at rest the fears of those critics who

## THE POWER ACT OF 1935

envisaged in them the destruction of private initiative in the future development of the power industry. The arm of the Federal government, as it appears here, does not reach out to stifle private initiative. Congress here has made clear its purpose to encourage the members of this industry to bring about a more economic coördination of facilities and resources for the benefit of all. Only where this invitation is not accepted and its nonacceptance is found to be detrimental to the public interest and the interests of the industry, is there to be any compulsory power exercised by the Federal Power Commission.

**P**PRIVATE initiative, with the exception of the limited field of federally licensed hydroelectric projects, still controls the construction, location, and character of the great generating stations and transmission lines that will make up the backbone of the integrated power systems. It should be noted that even where the commission issues a compulsory interconnection order at the request of a company engaged in the transmission and sale of electric energy, the proposed plans would be presented by a private company.

Only where a state commission appears as petitioner for compulsory action against a public utility would the Federal Power Commission have au-

thority to issue an interconnection order in which private initiative had not had a part, and as has been pointed out, the Federal Power Commission would in such case have no authority to compel the enlargement of generating facilities or to compel the sale or exchange of energy when to do so would impair the company's ability to render adequate service to its customers.

Taken all in all, these coördination provisions of the new act constitute an invitation by the Federal government to private management and leadership to join in an enterprise of vital importance to both private and public interests. That enterprise is big with opportunity for the industry and public alike. Properly administered by the Federal Power Commission with due regard to the economic and social factors involved, and supported by a genuine and whole-hearted coöperation on the part of the members of the industry, the policy of coördination, set out in this new act, should contribute greatly to the national well-being in time of peace and to the national safety in time of war. And those members of the industry who may now be inclined to approach with fearful tread these provisions of the statute may remain to claim from them a measure of legitimate opportunity which at the present time is undreamed of.



**Q** "THE body of documentary evidence . . . apparently convinced Congress that public control of rates, alone and of itself, offers no assurance of an adequate supply of electricity at the lowest economic price; and that a proper organization of power facilities and resources in an economically integrated power system is essential."

## PUBLIC UTILITIES FORTNIGHTLY

### Citations

<sup>1</sup> The statute here referred to as the "Federal Power Act of 1935" constitutes an amendment to the Federal Water Power Act of 1920 as amended. It was enacted as Title II of the Public Utility Act of 1935. Title I, called the "Public Utility Holding Company Act," deals with gas and electric holding companies and is administered by the Securities and Exchange Commission. Title II concerns the interstate electric operating companies and is administered by the Federal Power Commission. The Federal Water Power Act, as amended by the 1935 statute, is now legislatively christened "The Federal Power Act."

<sup>2</sup> § 201(b).  
<sup>3</sup> § 202 (a). Pursuant to the authority of this section the Federal Power Commission has authorized thirteen companies to transmit power to Mexico and seven companies to transmit power to Canada.

<sup>4</sup> § 201 (b) (c).

<sup>5</sup> § 205, 206.

<sup>6</sup> 207.

<sup>7</sup> 204.

<sup>8</sup> 203.

<sup>9</sup> § 305 (b).

<sup>10</sup> §§ 301, 302.

<sup>11</sup> 202a.

<sup>12</sup> 10 (a).

<sup>13</sup> The bill as originally introduced gave the commission control over construction of generating plants.

<sup>14</sup> "A Superpower System for the Region between Boston and Washington," United States Geological Survey, Professional Paper 123 (1921).

<sup>15</sup> § 202 (a).

<sup>16</sup> § 202 (b).

<sup>17</sup> §§ 203, 204.

<sup>18</sup> The Kansas Gas and Electric Company, on January 27, 1936, applied for approval of emergency connection with Oklahoma Gas & Electric Company and Empire District Electric Company. This case is now pending (March, 1936.)

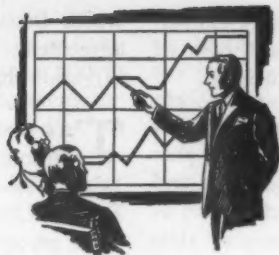
<sup>19</sup> These cases involved properties located in Arizona, California, Florida, Georgia, Idaho, Indiana, Kentucky, Michigan, Montana, Nevada, New Mexico, New York, North Dakota, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, and West Virginia.



### Mr. Ickes Has a New Name for It

"ACCEPTING the fact, as the record clearly establishes, that the Department of the Interior was created in the beginning to exploit the resources of America, what is the most effective step that can be taken to put an end to a policy that has become suicidal? The answer is plain. Let the Congress decree a final end to the era of reckless exploitation and announce adherence to the policy of conservation of our natural resources which, as I understand conservation, means the prudent use of those resources. And as an effective means of declaring this change of policy so that all may clearly understand it, let the Congress enact the bill that is now pending, changing the name of this Department to that of Department of Conservation. The mere passage of this bill would be declaratory of the intention of the United States government henceforth to go forward with a policy of conservation of our natural resources. It stands to reason that until we consciously and deliberately, with our eyes on the future, make some such affirmative declaration, the stupid waste of those resources will continue."

—HAROLD L. ICKES,  
*Secretary of the Interior.*



## How the "Sliding Scale" Reduces Rates

### *Success of the so-called Washington Plan of rate regulation*

Further discussion of this flexible and expeditious method of rate making, practiced with such favorable results in the District of Columbia. For a former article on the so-called Washington Plan see PUBLIC UTILITIES FORTNIGHTLY, April 23, 1936, p. 531.

By WILLIAM A. ROBERTS

PEOPLE'S COUNSEL, DISTRICT OF COLUMBIA

**J**UST thirty years ago two rather well-known young men participated in the preparation of a report on the relative merits of municipal and private operation of public utilities. One was Louis D. Brandeis, listed simply as an attorney at law of Boston, and the other was Samuel Insull, then president of the Edison Company in Chicago. There were a great many other names in the list of the Committee of the National Civic Federation, names of persons now known in most of the households of the nation. Buried in an inconspicuous paragraph in the early pages of the report was the following statement:

We also recommend the consideration of the "sliding scale," which has proved successful in some cases in England with reference to gas and has been adopted in Boston.

By this plan authorized capitalization is settled by official investigation, and a standard rate of dividend is fixed, which may be increased only when the price of gas has been reduced.

**T**HE so-called Washington Plan of public utility regulation is a collateral relation of the sliding scale advocated in the 1907 report.

It has been over fifty years since the conception of valuation was introduced into utility rate regulation. Prior to that time Federal, state, and local legislative bodies prescribed rates by mere fiat regulation which was frequently the result of a compromise between a utility bargaining for a franchise and the public body bargaining for service at the lowest rates obtainable.

Scandals naturally developed under such circumstances and the fer-



## PUBLIC UTILITIES FORTNIGHTLY

menting dissatisfaction finally exploded in the historic landmark case of *Smyth v. Ames*,<sup>1</sup> decided in 1898.

IT was in this decision that the court compromised between the proponents of original capitalization and the proponents of reproduction cost as standards for rate valuation. By simply allowing both standards, among others, to be given consideration in arriving at the "present fair value," the Supreme Court laid the foundation of valuation practice to which it has since clung consistently. However, as most of us are aware, dissatisfaction continued. Fluctuating values and prices resulted in the occasional shifts in the alignment of contending parties before the court.

Out of this dissatisfaction has grown a strong desire for a more stable and satisfactory valuation arrangement. One notable example of this was the "sliding scale" measure of gas utility rates attempted by the city of Boston, which failed because of frequent changes required to meet changing economic conditions. Of course, in England the control of dividends of utility corporations had long been understood, but England had no constitutional inhibitions to bother about.

Congress, in writing a public utility act for the District of Columbia in 1913, slipped in a modest little paragraph authorizing the commission to approve of a sliding-scale arrangement. It remained unnoticed until 1924, when the District of Columbia and the Potomac Electric Power Company hit upon this paragraph as the basis of the first Washington Plan

which brought to an end, by court agreement, apparently hopeless rate litigation that had gone on since 1915.

THE mechanics of this first Washington Plan are by this time fairly well known to the readers of *PUBLIC UTILITIES FORTNIGHTLY*. In brief, an agreed rate base of \$32,500,000 represented the value of the utility's property within the District of Columbia and suburban Maryland. Subsequent property additions were to be carried on the utility's books at actual cost with corresponding deductions for retired property. A basic return of 7 per cent was fixed on this valuation with a 50-50 profit-sharing arrangement on excess earnings (if any)—the consumers to get their share in the form of reduced rates. The plan called for a determination by the commission at the beginning of each year of the amount of profits and supervision of the distribution under the agreed terms.

Before the plan went into effect, 10 cents per kilowatt hour was the local domestic electric rate. The plan cut this to 7½ cents and reductions have automatically followed every year since that time as continued reductions stimulated increased earnings, which in turn were reflected in further reductions. By 1932, the rate was the lowest privately owned utility rate in the country, the utility's property had almost doubled in value (over \$60,000,000), and the utility's profits had increased so sharply through its participating in the profit-sharing agreement that it was obvious that a poor guess had been made in the first instance in determining the division of excess profits.

<sup>1</sup> 169 U. S. 466, 42 L. ed. 819.



## HOW THE "SLIDING SCALE" REDUCES RATES

FOLLOWING a court test (decided in favor of the public utilities commission) of the commission's right to change the terms of the agreement, the original plan was modified in 1932 so as to increase the percentage of excess profits which would be allocable toward the reduction of rates.

Under the new set-up, annual profits between 7 and 8 per cent were divided on the old 50-50 basis; profits between 8 and 9 per cent were divided on a 25-75 basis, with the customers taking the big end. On all profits in excess of 9 per cent, customers received a five-sixths' share. In all instances the utility retained the profits accrued during the test year and the amount so determined was reflected in rates during the successive year. In this manner rates continued to drift downward while the company continued to enjoy excellent profits.

But there were features of the original 1924 plan other than the division of profits, that, in the light of experience, needed adjustment. For example, there was the determination of depreciation by a sliding scale of percentages under which the utility accrued rather large sums to meet the costs of renewing worn-out property, when it had little accumulated in its reserve for that purpose. These percentages, under the plan, diminished gradually as the reserve accumulated so that

when the reserve equaled 20 per cent of the rate base, they would cease entirely. The accrual for the reserve included 4 per cent interest, computed monthly on the reserve balance.

ALTHOUGH the plan seems like simplicity itself compared with the conventional complicated method of valuation in rate proceedings, it soon developed that there were a number of defects. For example, the agreed rate base bore no direct relation to the unit cost of the various items constituting the property of the utility and when the time came to retire such items the book charge which had existed previous to the agreement was the only measure upon which they could be retired. Discrepancies resulted.

Another feature which caused difficulty was the relative impossibility of auditing or examining the accounts of the utility in the short length of time between the end of the test year and the time when the new rates must be fixed. Then also, errors were discovered in the accounting of the company after the rates had been fixed and there was no provision in the agreement to correct the injustice to either public or the utility as a result of these adjustments.

One of the most serious defects in the initial sliding scale was the utter absence of any automatic measure-



**Q** "CONGRESS, in writing a public utility act for the District of Columbia in 1913, slipped in a modest little paragraph authorizing the commission to approve of a sliding-scale arrangement. It remained unnoticed until 1924, when the District of Columbia and the Potomac Electric Power Company hit upon this paragraph as the basis of the first Washington Plan. . . ."

## PUBLIC UTILITIES FORTNIGHTLY

ment which would quickly meet changing costs of operation. For example, the price of fuel is subject to sharp fluctuation sometimes. These fluctuations may occur toward the end of the test year. In other instances there might be a sharp reduction in operating expenses yet the public would continue to pay rates based upon the higher levels of cost.

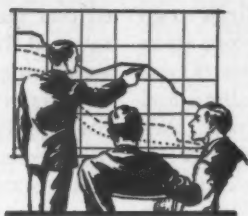
**F**INALLY, there was the complication caused by the fact that the power company's property spilled over into Maryland. The plan contained no provision for the allocation of property between the two jurisdictions and so the District of Columbia commission was in effect compelled to fix rates for Maryland customers. This caused occasional disputes as to whether or not the District of Columbia was bearing a part of the cost of electric current furnished suburban neighbors who were legally under the jurisdiction of the Maryland Public Service Commission.

These flaws are merely mentioned in passing to show that the Washington Plan as originally drafted was neither perfect nor permanent. And just as subsequent developments showed the need for subsequent revisions to date, it is not unlikely that future changes will require similar adjustments. In plain words, the Washington Plan is not a fool-proof automatic regulatory panacea; its success depends upon continuous and intelligent supervision by regulatory authorities.

In spite of these comparatively minor defects, however, the whole arrangement was such an outstanding success as compared with what might be called "normal" or the conventional

technique of regulation, that the Washington Plan deserved and received considerable study from utility operators and regulatory authorities in other jurisdictions. The recent dispute between electric utilities and the city of New York, for example, focused attention on the Washington Plan as a possible solution of the impasse. The metropolitan utilities eagerly prepared a sliding-scale arrangement of their own. In so doing they overlooked the fact that clear information as to the initial rate base is a necessary condition for any fair sliding-scale plan. There was no such information in New York city. Neither conventional valuation figures nor reliable company records were available.

**L**AST year, 1935, started a new chapter in the history of the Washington Plan—the extension of the device into the field of domestic gas rates, previously fixed by conventional methods. In the District of Columbia the gas companies had commenced a period of considerable prosperity early in 1930. This was the result in part of improvements in the method of operation and the introduction of natural gas for mixing purposes with the manufactured gas as required by local law. The public utilities commission moved to prepare a valuation of the property of the utility and by 1931 the valuation proceeding was underway. The usual corps of engineers were engaged on both sides to make inventories of the property which had first been established in 1846. They were confronted with the absurd requirement of the cost of reproduction theory that they determine the present cost of re-



### Regulation of Gas Rates by Sliding Scale

**L**AST year, 1935, started a new chapter in the history of the Washington Plan—the extension of the device into the field of domestic gas rates, previously fixed by conventional methods. . . . While the full measure of improvement of the new sliding-scale arrangement under the Washington Plan will not be known until after several years have passed, experience with prior attempts in this direction affords a sound basis for an expression of opinion that it will be found eminently satisfactory in the gas industry.”

producing gas apparatus which had first been built many years before and the manufacturers of which in some instances had long ceased operation.

It is at once amusing and discouraging to note that the estimates of the commission experts and those of the company differed by as much as 30 per cent in their statements of the final value of the property. When the extremely voluminous record had been completed, the public utilities commission commenced in the summer of 1934 its deliberations for the determination of the value required by judicial decision under the Constitution. Early in 1935 the results of its finding were published.

**T**HE utility was not satisfied and promptly appealed to the courts. The usual drawn out litigation was in prospect. And this was only the val-

uation proceeding; actual rate fixing would not be possible until questions of value were settled. At this point, the decision was made to extend the highly successful Washington Plan, under which electric service was being conducted, to the gas companies.

In August, 1935, the people's counsel for the District of Columbia submitted a tentative sliding-scale proposal on gas rates to the public utilities commission. The gas company waived the statutory requirement that such a proposal must arise officially from the utility and accepted the challenge to terminate pending rate litigation by putting its feet under the same conference table with the people's counsel and the commission's counsel, and working out a final agreement.

The commission itself did not participate in these conferences because of its statutory obligation to pass upon

## PUBLIC UTILITIES FORTNIGHTLY

the completed plan. However, it required the valuation proceedings to go on so as to produce a full record upon which a rate base could be determined. The conference work was tedious and difficult. Innumerable drafts of sliding scales were prepared to cover almost every imaginable contingency, but a plan was finally whipped into shape.

**I**N brief, the agreement finally submitted to the commission fixed a rate base for the three local gas properties of \$21,000,000. The basic rate of return was fixed at  $6\frac{1}{2}$  per cent. Between  $6\frac{1}{2}$  and  $7\frac{1}{2}$  per cent excess profits were divided on a 50-50 basis; between  $7\frac{1}{2}$  and  $8\frac{1}{2}$  per cent a 75-25 split was fixed, while on all profits in excess of  $8\frac{1}{2}$  per cent, the customers' share was fixed at five sixths. Conversely, however, where earnings failed to produce a profit of  $6\frac{1}{2}$  per cent, the plan provided that no rate change should be made unless the amount of the deficiency exceeded one-half per cent for a period of two years. If the deficiency should be greater than one-half per cent, the plan provides for a rate increase to overcome one half of the deficiency in the first year of the automatic rate adjustment.

Since the additions to the property during any given year may occur either in the early part of the year or toward its close it was provided that such additions should be weighted as to the time they had been in service during the year to secure a representative average condition of the test year for the purposes of determining the excess or deficiency in earnings. As a most important step toward overcoming difficulties encountered with

the earlier arrangement, it was provided that the initial rate base should be retained throughout the period of the arrangement and that the additions and betterments corrected as to accounting throughout the period should be added each year rather than to build on the successive steps in the rate base.

**T**HE infinite number of small transactions involved in improvement of the utility property were visioned as causing possible disagreement. An arrangement was made under which the accounts of the company for a period of five years could be reviewed constantly and the effect of any modification of those accounts by the commission could be carried into the adjustment in rate for the current year. This resulted in a measure of self-policing of the accounts by the utility in its own interest since there was no advantage to be gained by improper allocation of expense to capital when it should be charged to operation or vice versa. Numerous other precautions were carried into the arrangement to insure the integrity and permanency of the accounts. It was fully realized by the commission and by the company that the permanency of the arrangement depended upon the good faith of the parties and their willingness to secure and permit constant supervision of the accounting entries.

It was toward this end also that circumstances favored the avoidance of a grievous error in the original sliding-scale arrangement. Although accurate accounting cost for the entire life of the company was not available, most careful estimates of cost had been made by both sides. The differ-

## HOW THE "SLIDING SCALE" REDUCES RATES

ences of opinion as to certain of these items were ironed out and the books of the company completely rewritten so as to reflect either the actual cost of every item of property (available since 1915) or a reasonably accurate estimate of the cost based upon the records available for the earlier period in so far as there was property existing in the plant which was placed in the earlier years. Thus it is possible to retire items of property when its service value is exhausted and to remove them from the books together with all incidental costs incurred in connection with their replacement. The rate base can always show very nearly the true cost of property and disputes and differences with respect to retirement can be avoided.

IN view of the fairly long lived nature of much of the property in a gas plant as compared with some other utilities, a retirement fund equal to 10 per cent of the current rate base was deemed to be adequate. The retirement fund of the company at the time of the inquiry was quite low so a percentage arrangement was devised under which such a reserve could be accrued with reasonable rapidity but under which the maximum of 10 per cent could not be exceeded. For this purpose  $1\frac{3}{4}$  per cent of the rate base per

year was to be set aside for the retirement reserve and included with the operating expenses before the determination of profit. As a 10 per cent reserve was approached  $1\frac{1}{2}$  per cent would be used as the appropriate accrual figure and a still smaller percentage, barely sufficient to cover current retirements, would be used to balance around the 10 per cent reserve without establishing a fixed arbitrary limit which would prevent predetermination of accounting for retirement accruals.

The conferees proposed that the company and the commission could consent to a withholding of 10 per cent of any automatically required rate increase or decrease in order to permit of some flexibility in the ascertainment of the rates to consumer. This proposal carried with it the suggestion that the amount withheld should be available for increase or decrease in the succeeding year. This arrangement however was not approved by the public utilities commission for the excellent reason that such an agreement might be reached at any time both parties were willing and hence it unnecessarily encumbered the sliding scale.

AN unusual complexity was added to the problem in the District of Columbia by reason of the fact that



**Q** " . . . the Washington Plan as originally drafted was neither perfect nor permanent. And just as subsequent developments showed the need for subsequent revisions to date, it is not unlikely that future changes will require similar adjustments. In plain words, the Washington Plan is not a fool-proof automatic regulatory panacea; its success depends upon continuous and intelligent supervision by regulatory authorities."



## PUBLIC UTILITIES FORTNIGHTLY

statutory requirements necessitated two separate gas companies within that small area and a number of subsidiaries to conduct operations in near-by Virginia and Maryland. Provisions for consolidating the accounts of these companies in a determination of uniform rate was necessary. It was also necessary to devise an elaborate plan for allocating the property within the District of Columbia used for producing the gas consumed in the near-by areas. Like allocations of operating expenses and revenues were essential and the report of the conferees included detailed schedules for such purposes based upon the actual use of the property.

A number of refinements in the sliding-scale arrangement over that previously devised were included in the formal plan as submitted but the foregoing substantially outlines the arrangement. The manner in which the arrangement would work would be as follows: The test year would be each year of operation terminating at June 30th. Within a month thereafter the accounts of the company for the period would be available showing the amount of property added and the expense of conducting the operation and all other pertinent information. Prior to September 1st, which is the beginning of the heavy consumption period of gas in the District of Columbia, the data would be applied to the formula and an amount available for the reduction of rates for the coming year would be automatically determined. A new schedule of rates would be devised to consume this reduction in such a manner as to equably apportion it between classes of consumers and to provide for promotion of increased

use of gas as well as to meet competition from other fuels. These schedules of rates, after public hearing, would be placed in effect and another year would commence during which the test data would be compiled for still further reduction or possibly for increase if that unfortunate circumstance should arise. The important thing is that all of these functions could be performed in substantially less time than for a normal rate proceeding and certainly in infinitely less time than would be required for revaluation of the property of the company.

WHEN the new plan was presented to the commission it took some time for the purposes of study and then called a public hearing at which the plan was explained in the greatest detail and specific constructions and interpretations were placed upon its component parts. The press reaction to the arrangement was astonishingly favorable. Practically every newspaper in the city editorially supported and commended the plan. Such criticism as existed was directed toward the proposed schedule of rates submitted at the same time by the utility company in order to effect a reduction of about \$850,000 per year below its filed tariff rates. About \$550,000 of this reduction had been in effect for a period of two years as a result of a temporary  $8\frac{1}{2}$  per cent flat reduction applied to the bills of consumers pending the outcome of the litigation. There had been no scientific adjustment of the rates of the company for many years and new uses of gas, particularly for house-heating purposes, had arisen which warranted substantial changes



## HOW THE "SLIDING SCALE" REDUCES RATES



### Experience Required for Application of Sliding Scale

**"T**HE hope of relief from the ogre of valuation and the attractive reductions in rates which have occurred under the Washington Plan have induced comment upon it throughout the country. . . . The plan has tremendous advantages but it should not be considered unless all of the information necessary for its scientific and sound application is available. As with other complicated machinery, this tool of regulation can only be applied by practiced hands."

in the relation of the rate schedules to each other in the several brackets of consumption whereas other rate schedules were too high to compete on a fair basis with the aggressive appliance sales campaigns of competitive companies. Needless to say the sharp reductions which had occurred in the electric field by reason of another sliding-scale arrangement and increased consumption of domestic consumers caused some concern to be felt by the gas company officials as well as by the representatives of the public unless the new gas rates gave additional consideration to the legitimate demands of the larger consumer of gas. This caused considerable resentment particularly among the minimum bill consumers and others. The commission made some modifications and certain changes in the interest of clarity and simplicity. However, the substance of the proposal was approved by the

commission on the 13th of December and within three days the reduced rates were applicable upon bills of the consumers.

**W**HILE the full measure of improvement of the new sliding-scale arrangement under the Washington Plan will not be known until after several years have passed, experience with prior attempts in this direction affords a sound basis for an expression of opinion that it will be found eminently satisfactory in the gas industry. Much of the advantage of a sliding-scale system is in the saving of time in the adjustment of expenses or inadequate profit. If the public utilities commission decides that there should be a reduction in the basic rate of return in the sliding scale, it may affect such a reduction providing the evidence before it in public hearing so warrants. Without abandoning the

## PUBLIC UTILITIES FORTNIGHTLY

sliding-scale arrangement, the utility could then appeal to the court for determination of the reasonableness of such modification and in the last analysis it reserves the right to withdraw from the sliding-scale arrangement and have recourse to the constitutional protection. The likelihood of such a happening is for obvious reasons indeed remote.

The hope of relief from the ogre of valuation and the attractive reductions in rates which have occurred under the Washington Plan have induced comment upon it throughout the country. Indeed, in Massachusetts Governor James M. Curley in his message to the legislature urged the use of the sliding-scale system and asked the legislature to authorize the power of the state public service com-

mission to enter into agreement and arrangement toward this end.

**I**N New York, Governor Lehman in his legislative message went beyond the voluntary sliding-scale arrangement and urged the enactment of statutes which would authorize the state public service commission to order equitable sliding-scale arrangements. Inquiries have flowed from the public officials and public utility operators of many other jurisdictions.

The plan has tremendous advantages but it should not be considered unless all of the information necessary for its scientific and sound application is available.

As with other complicated machinery, this stool of regulation can only be applied by practiced hands.



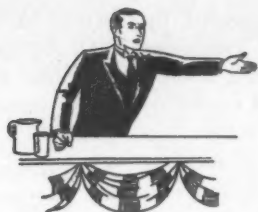
### Machinations of the "Telephone Trust"

**"I** SEE the A. T. & T. is charged with lending \$500,000 to Hecht-MacArthur, Inc., to produce the motion picture 'The Scoundrel' and a couple of others. As one who thought 'The Scoundrel' was pretty good, I cannot see what was the matter with that. The piece gave Noel Coward a chance to appear as a ghost, and he made a fine sepulchral job of it.

"Perhaps the A. T. & T. finances motion picture productions for some low reason, such as to encourage one lady to call up another lady and say, 'What about going to the pitchers tonight?' and the friend would reply, 'What's any good? I ain't see any pitchers that look like they was much to me.' And the pay-off would come at the end of the month on the telephone bill.

"But that wouldn't prove much except that the telephone company was a friend to man if it helped movie producers like Ben Hecht and Mr. MacArthur and thus gave the public something to telephone itself about."

—DOWN THE SPILLWAY,  
*The Baltimore Sun.*



## Must We Have Government by Subterfuge?

If the Federal government wants to go into the power business or any other enterprise not permitted by the Constitution, why not frankly submit an amendment to the people empowering the government to engage in such undertakings, rather than seek to do the things forbidden on the pretense of doing something else which is authorized by the Constitution?

By TULLY NETTLETON

**I**N unwesternized parts of China, according to those who have been there, it is the custom, if a difficult question of government is to be decided, to submit the issue to a scholar versed in the Chinese classics who will consult writings in a language legible to but a tiny fraction of his race and will produce an essay on what Mencius or Confucius wrote about the duties of rulers or the reverence of sons for their fathers more than a thousand years ago.

Strange? Not at all. In the United States when a close question of governmental authority is at issue we submit it to nine distinguished and learned men of the law, who consult a document written slightly less than 150 years ago, with some additions and interpretations since, and they tell us whether the challenged power is within the letter of that charter.

And what could be more natural or proper than that a people should

consult the wisdom of their forefathers—the fruit of hard-wrung experience and earnest thought, written into philosophy for their guidance or into basic law for their governance? How true it is that much they learned and wrought is ageless! Yet is it to be supposed that succeeding generations can coast along on the solutions achieved by the ancients without making their own contribution to the study of fundamentals in the light of problems of their own time?

If so, why, in the case of the United States Constitution, did that document provide for its own amendment? Isn't it asking a great deal of the founding fathers to expect from them a full outline for the treatment of electric power, hundred-million dollar corporations, and a national conservation problem, none of which could have been foreseen in their time? Or to expect the Supreme Court to find such an outline in their document?

## PUBLIC UTILITIES FORTNIGHTLY

THESE queries are suggested by the decision in the Tennessee Valley Authority Case, which is only one of the most recent and conspicuous examples of a controversy in which the highest judicial tribunal has been besought to squeeze from a few historic words and phrases the most ramified and finely distinguished meanings.

For example, let us follow the steps of reasoning by which the court as represented by Chief Justice Hughes in a most cogently written opinion of approximately 7,000 words, had to reach its conclusion that the sale and distribution of electric power from Wilson dam was constitutional.

To begin with, there was the power to make war. The site for the dam had been acquired under this power in order to use the electricity to manufacture explosives during the World War.

The site was acquired further—at least, so runs the argument, which has to be lived up to by millions of dollars' worth of dredging and channel construction—for the purpose of improving the river as a facility for navigation.

Not that the word "navigation" or any mention of dredging streams appears in that section of the Constitution which enumerates the powers of Congress. The right of Congress to control it and to improve streams for its sake is recognized by virtue of the decision in *Gibbons v. Ogden*<sup>1</sup> in which Chief Justice Marshall declared control of navigation was an inherent part of the power to regulate interstate and foreign commerce—the power the Supreme Court refused to

extend in the NRA and AAA cases. "All America," he said, "understands, and has uniformly understood, the word 'commerce' to comprehend navigation."

So, having acquired a dam site for purposes of aiding navigation and strengthening the national defense—and being presumably entirely innocent up to this point of any intent to go into the power business or set up "yardsticks" or regiment the lives of inhabitants of the valley—the government may invoke its authority under an entirely separate clause of the powers of Congress "to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States." It may then reduce to possession the "surplus" water power, which is now defined to mean practically any amount the dam will produce, may convert it into electric energy, and may build transmission lines if necessary to carry it to market.

Now in this arises an anomaly. In the case of *United States v. Chandler-Dunbar Water Power Co.*<sup>2</sup> it was held that a riparian owner could acquire no property right for power purposes in the flow of surplus water over even that part of a navigable stream bed which he owned. By implication or for practical purposes, then, the United States government owns all the water power and potential water power in streams that are susceptible of navigation whether actually navigated or improved for navigation or not.

By further inference it has the right to dispose of this resource, hydroelectric energy, in any reasonable way.

<sup>1</sup> (1884) 9 Wheat. 1, 6 L. ed. 23.

<sup>2</sup> (1913) 229 U. S. 53, 57 L. ed. 1063.

## MUST WE HAVE GOVERNMENT BY SUBTERFUGE?

But, no. Unlike an ordinary owner, the government must find some other pretext for developing and exploiting this resource.

Now, conveniently it happens that wherever enough of a fall exists in a navigable stream to turn electric turbine-generators, the fall is pretty sure to be an obstruction to navigation. And on almost any river the impounding of water in the spring will maintain a deeper channel for navigation in the summer.

All this works out fairly satisfactorily for the would-be government power producers if one is not too particular whether it is the tail or the dog that is being wagged. Everyone knows that in the earlier months of the promotion of the Tennessee Valley Authority its sponsors devoted much the greater share of their oratory to selling the idea as a publicly owned electric power project and extolled the prospect of bringing down private electrical utility rates generally by comparison. For every person who thought of the Tennessee river in terms of navigation undoubtedly one could find several to whom Muscle Shoals meant electric current and to whom it had never occurred that the stream might carry boats and barges.

YET when counsel came to face the appellate and the Supreme Court they gradually soft-pedaled the matter of the "yardstick" and "the abundant

life" and became more than ever concerned with navigation and the national defense. So when the court came to affirm the validity of what the government had done it had to reason somewhat in this fashion, to trace back in reverse order the steps described a while ago:

Government distribution of electric power is valid because it is a logical accompaniment of the production and sale of electric power; the production and sale of power is valid because it is a disposal of public property within the constitutional authority for disposal; this property or resource can constitutionally be disposed of because it was acquired in the course of the exercise of other constitutional powers, namely navigation and national defense; the control of navigation is a constitutional power because it is plainly included in the power to regulate interstate commerce; and finally the powers to regulate interstate commerce and provide for the national defense are constitutional because they are specifically stated in the Constitution.

So by an elaborate "house that Jack built" sort of argument the assurance is reached that TVA is constitutional. Again, as I have said, this is not in criticism of the decision. So long as the American people persist on the one hand in desiring progressive or novel treatment of in-



**Q** "FOR every person who thought of the Tennessee river in terms of navigation undoubtedly one could find several to whom Muscle Shoals meant electric current and to whom it had never occurred that the stream might carry boats and barges."

## PUBLIC UTILITIES FORTNIGHTLY

evitable newly arising situations, and on the other hand in assuming without analysis that the Constitution of the forefathers is broad enough to meet all their needs, that long will they pile upon their highest judicial tribunal difficult and tenuous problems in logic.

One anything but sensational newspaper commentator remarked that the court in this instance showed that it was not averse to listening to a fairy tale if the tale was a good one. It might be said rather that in one of those now recurring cases in which the American public asks that the Supreme Court and the Convention of 1787 should do their thinking for them the court has done an excellent job of connected reasoning to meet these hard requirements.

Yet the opinion, which in the nature of the case is voluminous enough, does not go into the validity of several aims of the Tennessee valley project that are fully as important as its navigation features. The program there has been announced and developed as one of flood control, erosion control, reforestation, and similar forms of conservation. In fact, within the limits laid down by the court and in part anticipated by the government, the public development of hydroelectric power becomes primarily a matter of conservation of that natural resource.

**I**N this respect the project enjoys an affinity with the conservation of soil fertility which the administration is trying to foster, and with still some question of constitutionality, under the new substitute farm relief bill. There, too, an element of evasion or at least equivocation is involved. The

situation recalls the efforts to suppress child labor through the commerce and the taxing powers before striking at it in the straightforward way of proposing an amendment. It resembles the reluctance shown by advocates of the NRA, the Wagner labor bill, and the Guffey coal bill to undertake the struggle involved in obtaining an outright constitutional mandate for national control of business.

Yet there are those who believe the nation is faced with situations it did not face at its founding nor in its early development. They believe that depletion, monopolization, or waste of natural resources such as water power, oil and gas, forests, wild life, coal, minerals, and soil fertility is gradually bringing about a national emergency.

Water power is in a somewhat distinctive category from the rest of these resources. As the reports of the National Resources Board have pointed out, the expenditure of energy by water as it flows downstream over falls and rapids is a recurrent, even perpetual, resource generated by the round of nature and waiting to be harnessed. It is not like the deposits of coal, petroleum, iron ore, or other minerals, of which the extraction of every ton leaves definitely that much less in the continent's underground storehouse for future generations.

**F**OR this reason proponents of public ownership are particularly eager that this natural heritage be developed by the government both on the principle of improving each shining kilowatt and also in order to preserve to the people full title in a resource that some day may be more needed than





### Change by Amendment

**"W**HETHER those who believe in public control of the nation's resources are right or wrong, there is no reason why they should be charged with villainy and treason if they should propose to alter and in their opinion improve details of the Constitution by the method it provides for amendment."

---

now. At the same time those who believe in the advantages of private initiative hold it correspondingly important that hydroelectric sites be leased for regulated private development instead of being saddled forever with the reputed inefficiencies of public management.

As to the mineral resources, these would in most countries be claimed as property of the government or at least under control of the government regardless of surface ownership. Such is the rule of "regality of minerals" in Europe generally, and the effect of the nationalization which Mexico and other Latin-American countries are inaugurating. Certainly the situation is serious when the *Texas Weekly* could assert a little over a year ago that enough natural gas was being wasted—literally blown off into the air—in Texas every ten minutes to supply an average gas consumer for 100 years. The Guffy coal bill aims, however wisely or unwisely, to ration-

alize an industry suffering from another form of waste, namely uneconomic production.

**B**ETWEEN these two types of resources, the irreplaceable minerals and self-replenishing water power, lies an intermediate group which under favorable circumstances are self-maintaining but if neglected or exploited may run down to the point of exhaustion. These include forests, wild life, and soil fertility.

All are closely related to the streams which furnish hydroelectricity. Properly conserved forests steady the runoff of water into rivers both for power and for water supply of cities. They give shelter to birds and animals, and the streams harbor useful stocks of fish.

Erosion—the washing away or leaching out of rich top soil—is the great thief of farm fertility, filling once-clear streams with black and eventually yellow mud. Even dwellers on the lowland acres that are par-

## PUBLIC UTILITIES FORTNIGHTLY

tial and doubtful beneficiaries of this process have need of flood-prevention, one of the objectives in conservation. Wind erosion, of course, is sometimes as much of a factor as water erosion, for Paul B. Sears declares in his book, "Deserts on the March," that some lands in the western American "dust bowl" have lost in four years fertility which it took four thousand years to create.

WHETHER the national government is the necessary or proper agent for combating these various apparent forces of depletion is a subject for lively debate. Persons not easily alarmed will continue to pin their faith to states' rights and individual intelligence as the safest weapons. National planners, though, allege the inadequacy of states to operate or cooperate on a wide enough scale to preserve these natural resources. They argue, moreover, that the private profit incentive is not sufficient or suitable to support undertakings whose benefits are spread over the whole community.

Human values, of course, are the ultimate justification, if any, for planning ventures of such magnitude as TVA and for conservation activities generally. These, it is urged, must be promoted by agencies less concerned with costs and returns than private corporations have to be. And, heaven knows, governmental agencies have shown themselves sufficiently free of inhibitions on those lines.

Whether those who believe in public control of the nation's resources are right or wrong, there is no reason why they should be charged with villainy and treason if they should propose

to alter and in their opinion improve details of the Constitution by the method it provides for amendment.

THE frank and clean-cut way to determine the wishes of the American citizenry on such a question of policy would be to bring forth an amendment or amendments for discussion. Why should not the formulation of such a proposal as a basis for analysis be an appropriate project for some of our students of government?

One such tentative formula for an amendment has been put forward—not in advocacy but merely as "something to shoot at"—by a writer in the *Georgetown Law Review*. It reads:

Congress shall have the power to protect, conserve, and regulate the exploitation of all natural resources inherent in all lands and waters of the United States and territory subject to the jurisdiction thereof. In the exercise of such power the Federal government may acquire, regulate, operate, or dispose of lands, waters, and other properties and property rights in whatever manner may be necessary for the carrying out of the purpose of this amendment.

Action on this proposition would determine whether the people and the states really wish to give explicit authority to TVA, including the more shadowy portions yet to be passed upon, and to put such programs in general on a sound constitutional basis. Doubtless some refinements would be proposed in the wording of the amendment; that is one purpose in advancing a draft. Something about contracts would have to be included if it were to support the new AAA. Retail distribution of electricity through municipalities might be expressly authorized. Or any simplification would have its advantages.

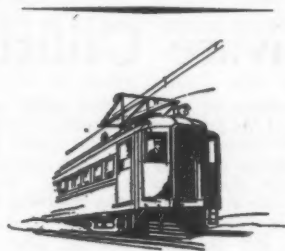
## MUST WE HAVE GOVERNMENT BY SUBTERFUGE?

WHAT would be the outcome of such discussion it is impossible to say.

Would phrases instead be found for limiting more safely the very sweeping powers here contemplated? Or would we have to rely on congressional restraint to stop short of wholesale socialization? Is socialization or nationalization the only way to accomplish conservation? Is it wiser nevertheless to endure present wastes than

to court bureaucracy and other political evils we know not of? Or would study disclose some useful alternative without constitutional amendment or establish the preference of the people for observance of existing limitations?

I do not pretend to know the answer to these questions but I believe the effect of open, calm, frank, and informed discussion of the issue would be wholesome.



### Street Railway Oddities

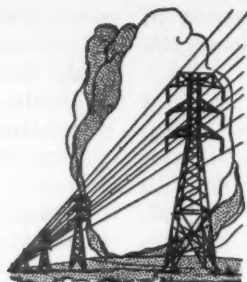
RIDING along in street cars, with nothing to occupy their minds, passengers subconsciously listen to conversations going on around them. An agency, noting this fact, is reported by *Capper's Weekly* to be experimenting with a new type of advertising. They send out men in pairs who engage in a carefully rehearsed line of talk in which one tells the other all about his enthusiastic experience with some special brand of shaving cream, cigarettes, auto tires, etc.

\* \*

PIGEON wings over Portland, Oregon, had the local traction officials mildly perturbed as the Kubat family bird flew homeward with a weekly pass tied to his leg. When young Urban Kubat goes to work early in the morning, he takes the pigeon with him and sends the pass back "via airmail" when he arrives. Urban's father repeats the performance and Mrs. Kubat and the children use the pass the rest of the day. "There isn't anything we can do about it," laughs H. G. Brumbaugh, company official, "but I don't think the practice will become common enough to cause us much worry."

\* \*

A SUBWAY system embracing the principles of a "moving sidewalk," which would require a passenger to wait not more than forty-two seconds for a local "train," was described recently at the convention of the American Institute of Electrical Engineers. The system consists of three platforms, parallel to each other. The first is stationary, the second, or local platform, moves intermittently, and the third, or express platform, moves continually but slackens its speed at definite intervals. The stationary platform runs the entire length of the system, and passengers gain access to it from the street or from the basements of stores or offices buildings. There are no stations, as the local can be boarded at any point on the line.



## How the TVA Really Hurts Private Utilities

*THIS is an outspoken article by an outspoken utility executive who happens to be the head of one of the prominent privately owned electric utility companies operating in the Tennessee valley. He denies Mr. Lilienthal's claim that the TVA is helping privately managed electric utilities and gives reasons for his position that TVA is not only harmful but potentially fatal for the entire American electrical industry.*

By JO. C. GUILD, Jr.

PRESIDENT, THE TENNESSEE ELECTRIC POWER COMPANY

**M**R. David E. Lilienthal, director and general counsel of the Tennessee Valley Authority, has recently<sup>1</sup> been striving to convey the idea that the power program of the Authority has been helpful rather than harmful to the private utilities operating in the Tennessee valley area.

This story has been spread throughout the country by the Authority during the past year. It is a smoke screen designed to conceal from the public mind a program of ruthless warfare and destruction which the TVA has been waging against the private power industry in the valley ever since the Authority's inception.

As president of The Tennessee Electric Power Company, it is my pur-

pose to present the true facts of the situation as we, who live in the Tennessee valley, know them.

Mr. Lilienthal speaks in high terms of the accomplishments of The Tennessee Electric Power Company. He calls attention to the great increase in sales per kilowatt hour to domestic customers effected by this company. He very kindly points out that the accomplishments of The Tennessee Electric Power Company have been so remarkable that the Edison Electric Institute in June, 1935, selected this company as the outstanding company in the country because it had established "one of the most, if not the most, remarkable sales increase in residential, commercial, and industrial power in the history of the electrical industry." Again in a speech at Louisville, Ky., on November 25,

<sup>1</sup> See address before the Cleveland Advertising Club, Cleveland, Ohio, June 2, 1936; see also PUBLIC UTILITIES FORTNIGHTLY, June 4, 1936, p. 741.

## HOW THE TVA REALLY HURTS PRIVATE UTILITIES

1935, he said, "This (The Tennessee Electric Power) company stands head and shoulders over any other company in the United States."

**W**E thank Mr. Lilienthal for these kind words, but when he says "financially, the private utilities in the TVA area are prospering," I must decline to go along with him. If such a statement was intended to be taken at its face value, how can it be reconciled with the fact that securities of this company are selling as much as 42 per cent below par, when the securities of other operating companies in the same group outside of the Tennessee valley are currently selling above par?

As I write this, the first and refunding 6 per cent mortgage gold bonds of The Tennessee Electric Power Company are selling at 98½ and its 5 per cent bonds are selling at 92¼. Within the past few months northern companies of The Commonwealth & Southern group have refunded their bonds, putting them on a 3½ per cent and 3¾ per cent basis and they are selling in the market today at from 103 to as high as nearly 109. Their 5 per cent preferred stock is selling at \$104 per share, while the 5 per cent preferred stock of The Tennessee Electric Power Company is selling at \$58 per share. This is what hurts. This is what the threat of the TVA has done to the credit and securities of this company.

The Tennessee Electric Power Company serves just as good customers as do these other companies. Its property is in just as good shape. Its employees are just as loyal and aggressive. It is one of the most conservatively financed utility companies in the

country. Electric sales have shown recovery and improvement in Tennessee just as they have in the territory north of the Ohio river.

**I**F The Tennessee Electric Power Company could refinance on the same basis as its sister companies above referred to, this company could effect a saving of nearly \$1,400,000 per year, as well as secure money for improvements and betterments at lower rates of interest. What this means may be more clearly understood when I state that if this saving were made and if it could be passed on to the domestic customers of this company, the residential rate could be reduced nearly 1½ cents per kilowatt hour, thus putting it materially below the rates charged by the cities served by the TVA.

The TVA declares it must market its "surplus" power as a part of the administration's "yardstick" program. It is not content with entering into contracts to supply the power requirements of municipally owned and operated systems not now served by private companies. It is not content with securing new industrial power business through the medium of its low subsidized rates in competition with the private utilities. Nor is it content with promoting, organizing, and in many instances actually advancing the money and doing the construction work for rural electric cooperative associations. The TVA for three long years has carried on uninterruptedly a systematic and all inclusive program of propaganda designed to engender in the minds of the people of the valley and in the minds of the utilities' own customers, employees, and stockhold-

## PUBLIC UTILITIES FORTNIGHTLY

ers, a spirit of distrust, dissatisfaction, and hatred for private enterprise in the power business. Moving pictures, direct mail, newspaper and magazine publicity (not paid advertising), demonstration showrooms—nothing has been overlooked by the publicity experts employed by the TVA to promote the Authority's campaign. Invitations to address public gatherings have been seized upon eagerly by the Authority's directors as opportunities to promote public ownership of power facilities. Local communities have been encouraged to hold referenda in favor of municipal ownership in order to buy TVA power or to force the sale of local private utility systems at distress prices, or to duplicate the existing distribution systems with the aid of gifts from the Federal Treasury.

**T**HE TVA is constantly and continually promoting municipal ownership in the territory served by this company. It is aided and abetted in this program for the development of municipal ownership by the grants given by the Public Works Administration, which has already offered to the city of Lewisburg an outright gift of \$45,000, to the city of Lenoir City \$45,000, to the city of Columbia \$92,000, and has held out a similar and correspondingly larger grant to the city of Chattanooga and grants to

other cities served by this company. This is an outright gift of taxpayers' money to these municipalities, never to be repaid. It is a present from the Federal government which in turn, of course, must borrow that money and the taxpayers must pay interest thereon for many years to come.

**A**s an example of what all this agitation leads to, a power referendum was held in Chattanooga in March, 1935. The question was whether or not the city should issue \$8,000,000 in bonds to embark in the power business by building for itself, or by purchasing from this company, a distribution system, and then purchase power from the TVA. The TVA engineers have been and are now very active in this matter. I was asked as president of The Tennessee Electric Power Company to attend a conference to determine terms and to arrange other details for the purchase of this company's property in Chattanooga.

On February 19, 1936, I stated the company's position in a letter to the chairman of the electric power board of Chattanooga and that letter I quote below:

In our opinion nothing could be gained by such a conference as you suggest. We understand that \$8,000,000 is the sum authorized for acquiring or building a distribution system for the city of Chattanooga. It should be apparent to all well-informed per-



**Q** "THE TVA for three long years has carried on uninterruptedly a systematic and all inclusive program of propaganda designed to engender in the minds of the people of the valley and in the minds of the utilities' own customers, employees, and stockholders, a spirit of distrust, dissatisfaction, and hatred for private enterprise in the power business."

sons  
which  
so fa  
Elect  
Chatt  
woul

Th  
is an  
tem.  
five l  
1,600  
lines,  
gener  
tanoc  
rest  
our

one t  
that  
of C  
trans  
furni  
tanoc  
busin  
the h

Yo  
peopl  
system  
lation  
of the

In  
statut  
we c  
this  
could  
agree  
spect

Mr.

associ  
rates.

These

choice

the rat

tomer

determ

had so

city o

specifi

TVA

TH  
w  
ity cha  
varies  
per kil  
rates g  
utilitie



## HOW THE TVA REALLY HURTS PRIVATE UTILITIES

sons that \$8,000,000, which is the top limit which you might be able to pay, would fall so far short of compensating The Tennessee Electric Power Company for the loss of its Chattanooga business that a conference would accomplish nothing.

The distribution system of Chattanooga is an integral part of our entire power system. A large portion of the capacity of our five hydroelectric plants, three steam plants, 1,600 miles of high-tension transmission lines, and numerous substations, is used to generate and transmit electricity to Chattanooga. To sever Chattanooga from the rest of our system would not only reduce our gross electric revenues approximately one third, but would also render valueless that part of our system outside of the city of Chattanooga (namely, generating plants, transmission lines, substations, etc.) used in furnishing power to our customers in Chattanooga. For the power company to sell its business in Chattanooga would be taking the hub out of the wheel.

You, of course, know that thousands of people have invested their money in this system which has been built under the regulation and direction of the public agencies of the state of Tennessee.

In view of all the facts, including the statutory limitation on your ability to pay, we cannot see how any conference between this company and your Honorable Board could reach any conclusion or come to any agreement, and therefore we must most respectfully decline to hold such a conference.

Mr. Lilienthal states that cities and associations have "adopted" the TVA rates. "Adopted" is hardly the word. These cities and associations had no choice, no word at all with respect to the rates they were to charge their customers. These rates were fixed and determined upon by the TVA before it had sold a single kilowatt hour to any city or association. These rates are specified in the contracts between the TVA and these cities.

**T**HE TVA director states that the wholesale rate which the Authority charges the cities and associations varies but little, perhaps a mill or two per kilowatt hour, from the wholesale rates generally charged by the private utilities in the same territory. If this

is true, and municipalities have been buying power at wholesale from private utilities at such low rates in the past, why, one may ask, did they not adopt the TVA retail rates, or something close to them, a long time ago? Why did these municipalities maintain rates for years materially higher than the rates charged by The Tennessee Electric Power Company? The answer is that they did not elect to charge the TVA retail rates of their own free will. These rates were forced upon them by the TVA. Some municipalities in Tennessee, owning their own systems, have refused to buy power from the TVA because they did not see fit to have retail rates dictated by the TVA for twenty years.

It would appear that Mr. Lilienthal wants to create the impression that the TVA is a mere wholesaler of power. He points out that the wholesale rate it charges is not much different from the wholesale rates charged by the private utilities. The implication is that the private utilities should not complain about the TVA wholesale rate.

**I** WOULD have no quarrel with this wholesale rate except for two things. In the first place, the TVA dictates the retail rates to these municipalities who buy from it. In the second place, I would have no quarrel with Mr. Lilienthal about his wholesale rates if he had told the whole story about them. He did not mention the fact that the TVA paid only \$16,900 in taxes on property and funds of approximately \$380,000,000. Neither did he mention the fact that of this total property and funds of \$380,000,000 only \$19,500,000 has been charged to power.

## Campaign for Socialization of the Power Industry



**"T**HERE should be no question in anyone's mind, who has followed the administration's policy with reference to the development of power resources by means of the TVA, EHFA, The National Power Policy Committee, PWA, and other agencies, that the underlying purpose is the socialization of the electric utilities of this country. Public ownership of electric utilities is the real goal."

Nor did Mr. Lilienthal see fit to mention, or else he overlooked the fact, that the TVA gets reduced freight rates on all the material which it uses in its construction program and that it uses the facilities of the United States printing office and it franks all of its advertising, bills, statements, and letters, and further that all the cost of insurance and damages which this company must pay in its operating expenses is taken care of for the TVA from the Federal Treasury. Nor did he mention a most important fact, that the allowance made by the TVA for depreciation is entirely inadequate, which the Comptroller General of the United States has already criticized as far below the true cost, and much less than ordered by the Tennessee Railroad and Public Utilities Commission for this company. These are some of the subsidies which make the TVA wholesale rate to municipalities possible.

**T**HE retail rates which the TVA has required the municipalities to put in force constitute the so-called famous "yardstick" for domestic rates. That "yardstick" is unfair and unjust and the rates are made

possible only by further subsidies and by grants to these municipalities. The TVA, by promotion of sales and the furnishing of accounting, engineering, and other services to these municipalities without charge, materially reduces their operating expenses. The "yardstick" is unfair because these municipalities do not have to pay any Federal income or other Federal tax, nor state, property, income, or other state taxes. Municipalities, also, are tendered a gift from the Federal Treasury of from 30 per cent to 45 per cent of the cost of an electric distribution system—an outright grant, never to be repaid. The effect of such removal of taxable property from the tax rolls can mean but one thing—that unless the cost of government is reduced to correspond to the loss in tax revenues, the deficit must be made up by higher levies upon those left in ownership of private property.

There should be no question in anyone's mind, who has followed the administration's policy with reference to the development of power resources by means of the TVA, EHFA, The National Power Policy Committee, PWA, and other agencies, that the

## HOW THE TVA REALLY HURTS PRIVATE UTILITIES

underlying purpose is the socialization of the electric utilities of this country. Public ownership of electric utilities is the real goal.

**M**R. Lilienthal criticizes state regulation. The TVA has refused to recognize the jurisdiction of the state public utilities commissions in the area in which it operates. By state statute (inspired by the administration at Washington) the Tennessee Railroad and Public Utilities Commission has been ordered to keep its hands off all matters pertaining to the TVA. It has been popular in some quarters to criticize state regulation, to claim that it has been a failure. This criticism of state regulation comes from those who favor and do everything in their power to promote public ownership. They realize very clearly that they must first discredit and tear down state regulation before they can accomplish their purpose.

Mr. Lilienthal was formerly a member of the Wisconsin Public Service Commission. At no time during his connection with that commission did he suggest or order rates such as those which have been dictated to municipalities by the TVA. Nor did he as commissioner ever have the pleasure and privilege of approving such a low rate as that charged by The Tennessee Electric Power Company. When he was a state commissioner he had to be governed by the law and by sound economic principles. He had to deal with facts and not with fancies. He was not able then, as he is now, to disregard the law and costs. He had no Federal Treasury behind him upon which he could draw as occasion required. He had no funds with which

to assist the utilities in promoting their business. Any business can make prices below cost, hoping that the development of sales may eventually restore the balance and make the business profitable, but who is going to feed the horse until the grass grows?

**D**URING the last fiscal year, the TVA, on property and funds totaling approximately \$380,000,000, paid a total of \$16,900 in taxes, none of which was paid in Tennessee. As already stated, the cities and cooperative associations supplied by the TVA, which charge the rates dictated by the TVA, pay no taxes. During the year 1935, the taxes of The Tennessee Electric Power Company on property less than one third of that represented by the TVA amounted to \$2,113,292, or nearly 16 per cent of its total revenues, of which state and local taxes amounted to \$1,821,108.

At this very moment the Congress of the United States is considering a further increase in taxes that will raise the taxes paid by this company—a part of which will be given to the TVA to carry on its program of unfair competition.

Now it is significant that the state and local taxes paid by The Tennessee Electric Power Company amount to 2 cents per kilowatt hour on the electricity sold to its domestic customers. Or, to put it another way, if The Tennessee Electric Power Company could be relieved of all state and local taxes and if all of this saving were passed on to the domestic customers, the resulting domestic rate would be 25 per cent to 30 per cent less than the rate paid by the domestic customers of the

## PUBLIC UTILITIES FORTNIGHTLY

municipalities which the TVA serves.

The TVA puts considerable emphasis upon the large increase in domestic consumption of electricity in Tupelo, Mississippi, and in the other municipalities to which the TVA supplies power wholesale and which are compelled to use the TVA residential rates.

STATISTICAL Bulletin No. 8, of the Tennessee Valley Authority, which was issued in May, 1936, states that the twelve months' average domestic use per customer in the 7 cities and coöperatives it supplies was 1,110 kilowatt hours per customer. The average population of the 7 cities supplied by the TVA was approximately 3,300. May I call attention to the fact that The Tennessee Electric Power Company, serving 412 localities (many of which are settlements of less than 100 population), and having an average over-all population of only 1,235 per locality, is also selling approximately 1,100 kilowatt hours per domestic customer per year.

I cannot help but question sometimes, why—if we are as good as Mr. Lilienthal says we are—the TVA does not cease its efforts in behalf of public ownership and recommend to the citizens of Chattanooga, Lewisburg, Columbia, Lenoir City, and other places, that they continue to purchase

their electric requirements from The Tennessee Electric Power Company as they have for many years past. What is the reason for trying to drive us out of business? Why is it necessary, and what is the purpose, unless it is part and parcel of the program for the socialization of the power resources of this country.

ANOTHER situation is revealed in Statistical Bulletin No. 8 of the Tennessee Valley Authority which will undoubtedly raise some serious question, particularly in the minds of those charged with the duty of regulating rates of electric utilities as well as those charged with the responsibility of the management of the private utilities. It appears that the 7 cities to which the TVA is supplying power wholesale and which were using the TVA residence and commercial rates were selling commercial customers two and one-half times as many kilowatt hours per year as they were selling to residential customers, yet these same commercial customers paid an average rate per kilowatt hour 25 per cent higher than the residential customers. In view of what Mr. Lilienthal has said about the relation between volume of sales and costs and rates, this discrepancy between commercial and residence rates seems peculiar to say the least. Only one



**Q** "WHEN one contemplates the purpose behind the TVA, when one sees what it has already done to the credit and securities of the utilities of the Southeast, and when one visualizes what the future holds in store for these utilities, if this socialization of the electric utilities continues, one is justified in being very skeptical of Mr. Lilienthal's consideration for the private utilities."

## HOW THE TVA REALLY HURTS PRIVATE UTILITIES

explanation seems adequate and that is that the TVA residential rates are what we have always suspected—political rates made to catch votes, where they are—in the homes.

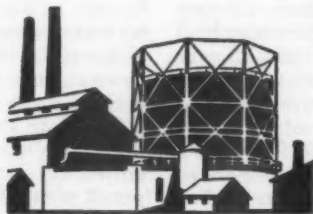
To quote the TVA director again, this is a rather "black picture that I have painted." Yet I feel that the industry and the people residing in the valley are entitled to know the facts. He is a wise mortal indeed who calls in the doctor when he realizes he is seriously ill and does not wait until his case has become hopeless. Certain it is that if the TVA is successful in carrying to completion the power program in which it is now embarked, it will mean not only the annihilation of every company operating in the Tennessee valley, but the eventual destruction of the electric utility industry throughout the United States.

WHEN one contemplates the purpose behind the TVA, when one

sees what it has already done to the credit and securities of the utilities of the Southeast, and when one visualizes what the future holds in store for these utilities, if this socialization of the electric utilities continues, one is justified in being very skeptical of Mr. Lilienthal's consideration for the private utilities.

Mr. Lilienthal (who likes to quote from the writings of Lewis Carroll) might well recall what the author of "Alice in Wonderland" said in "The Walrus and The Carpenter." It will be remembered that the walrus and the carpenter went down to the shore and invited the oysters to take a walk with them. What happened is revealed so clearly in the last verse of that poem:

*"Oh Oysters," said the carpenter,  
"You've had a pleasant run!  
Shall we be trotting home again?"  
But answer came there none—  
And this was scarcely odd, because  
They'd eaten every one.*



### Will the Gas Industry Be in Clover?

MORE than passing interest was attached to a recent press report from the *St. Paul (Minn.) Dispatch* that William Mahle and Harold Ohlgren, senior chemistry students at Macalaster College, have discovered a process for manufacturing usable gas from ordinary roadside white clover. The discoverers, both in their early twenties, claim that on 3,000 acres of the cheapest sub-marginal land can be grown enough clover to produce sufficient gas to supply cities the size of St. Paul. Dean R. U. Jones, of the Macalaster department of chemistry, believes that the boys' experiment has great possibilities, but from last reports the gas industry was not yet prepared to go "into clover."





# Financial News and Comment

By OWEN ELY

## *Electric Earnings Best Since 1931*

**D**URING the first quarter of 1936, gross revenues of electric utilities gained about 5½ per cent compared with a gain of 13 per cent in kilowatt hours. While only partial interim figures on net income are available for the industry, the editor of the *Annalist* estimates a gain of 7-8 per cent for the first quarter (compared with last year), and Dow Jones had made a similar estimate. These averages, however, were based on income statements in which 1935 Federal tax rates were applied whereas taxes applicable to 1936 earnings may be considerably increased under pending legislation. On this basis the gain might be reduced to approximately 5 per cent. (Should certain radical proposals for special taxes on intermediate holding companies be revived and enacted in the closing days of Congress, these gains might be still further reduced.) On the other hand, present or potential savings due to bond refunding are probably not fully reflected in the current figures; and flood losses in March may also have affected some of the companies included in the above compilations.

In view of favorable results for April earnings (now appearing) and the latest spurt in the weekly electric output figures (18 per cent over last year for the week ended May 30th), the estimates cited appear, in the writer's opinion, quite conservative.

During the latter half of 1935, elec-

tric power production showed a rather more consistent uptrend than in the first half; accordingly, the second half this year may not show as large gains over 1935 as have been recently registered. However, the industry has in its favor three important load-building factors: (a) the large gains in appliance sales, (b) increasing construction of new homes, (c) general gains in commercial and industrial activity.

## *Recent Corporation Earnings*

**A**ERICAN Water Works in the twelve months ended April 30th earned \$1.44 a share against 90 cents last year. In view of the improvement in earnings, it seems possible that resumption of dividends on the common stock (omitted about the middle of last year) might be decided some time in 1936.

American Power & Light Company in the twelve months ended April 30th reported net income of \$8,759,787, compared with \$5,246,394 last year. The directors have declared quarterly dividends on the two preferred stocks, payable July 1st, at the rate of one half the regular rates, compared with previous declarations of one quarter. Largest gains in the American Power & Light System were made by Montana Power Company, Washington Water Power Company, and Texas Power & Light Company. At present the first two companies are obtaining some revenues from the Federal government in connection with power used to construct dams



## FINANCIAL NEWS AND COMMENT

at the Grand Coulee and Fort Peck projects; eventually, however, they may be affected by competition from these projects.

International Telephone & Telegraph Corporation and subsidiaries in the three months ended March 31st earned 25 cents a share against 19 cents last year.

Associated Gas & Electric Corporation and subsidiaries reported a gain in gross revenues for the year ended March 31st of 17.5 per cent, but the balance after interest, amortization, etc., was 23 per cent lower. The report excluded nonrecurring expenses in connection with various investigations, the Wheeler-Rayburn Bill, legal cases, etc. Part of the gain in gross was due to change in the system set-up, and including all present properties as if owned throughout the two years the gain amounted to only 4.5 per cent. The balance after charges was slightly larger on this basis.

\$7 prior preference stock, compared with \$12.24 for the previous period.

American Light & Traction Company and subsidiaries in the twelve months ended April 30th reported net income of \$1.43 a share compared with \$1.12 in the previous twelve months.

The Bell Telephone System gained 78,200 stations in May, which was a new record for increased business for any similar months in its history (it compares with a gain of 77,100 in May, 1929). For the five months to May 31st the system gained 357,000 stations, compared with 209,000 in 1935 and 201,000 in 1934. June and July usually show a seasonal loss due to the vacation season, but it remains possible that new business this year might offset this seasonal influence.

New York Telephone Company in May gained 11,279 stations, compared with 10,817 in the previous month and 7,003 a year ago.

**E**LECTRIC Power & Light Corporation and subsidiaries for the twelve months ended April 30th reported net income of \$3,824,646 compared with a deficit of \$216,707 in the preceding twelve months. In the three months ended April 30th the company earned more than 3 times the net income for the corresponding period last year, the balance after preferred dividends amounting to 17 cents a share on the common stock. United Gas Corporation, its affiliate, reported net income of \$7,362,225, a gain of about 67 per cent over last year. In the three months ended April 30th United Gas' net income was nearly double that of the corresponding period of last year, and amounted to 15 cents a share on the common stock.

United Light & Power Company and subsidiaries for the twelve months ended April 30th earned \$5.58 a share on the \$6 first preferred stock (on which there are accumulated unpaid dividends) compared with \$1.24 in the corresponding previous period. Its subsidiary, Continental Gas & Electric Corporation, reported \$20.30 per share on the

**N**ATIONAL Power & Light Company in the twelve months ended April 30th reported a gain of about 1 per cent in net income, but for the three months ended April 30th the gain amounted to 4 per cent. Pennsylvania Power & Light, the most important unit in the system, recently inaugurated lower rate schedules; the reduction amounted to about \$1,500,000 annually.

Utilities Power & Light Corporation in its report for the year 1935, recently released, showed a consolidated net loss of \$1,889,824, compared with a loss of \$2,230,577 a year ago.

Arkansas Natural Gas in the first quarter earned 20 cents a share against 7 cents last year. According to *Standard Statistics'* estimate, the full year's net might reach 65 cents compared with 14 cents last year.

American Gas & Electric Company and subsidiaries in the twelve months ended April 30th showed net income of \$1.95 a share compared with \$1.73 last year.

For twelve months ended April 30th Public Service of New Jersey reported earnings of \$2.42 a share, compared

## PUBLIC UTILITIES FORTNIGHTLY

with \$2.75 in the corresponding previous period, the decline being due to rate cuts.

**T**HREE subsidiaries of Standard Gas & Electric Company reported moderate gains in earnings for the twelve months ended March 31st: Northern States Power Company (Delaware) and its subsidiaries reported a gain of 3 per cent over last year, Louisville Gas and Electric, an increase of about 15 per cent, and Duquesne Light, a gain of about 3 per cent.

Federal Light & Traction Company (Cities Service System) reported \$2.36 a share earned on the common stock for the twelve months ended March 31st compared with \$1.96 in the previous twelve months.

Interborough Rapid Transit Company traffic in the month of April showed a gain of only .3 per cent compared with an increase of 1.7 per cent for ten months ended April. This was probably due to the opening of the Fulton street extension of the Independent Municipal system in Brooklyn, as well as loss of short-haul traffic to new bus lines in Manhattan (which replaced surface lines). The balance after charges for April and ten months showed moderate gains (about 2 per cent in each case).

### *Pacific Lighting Corporation— Natural Gas Distributor*

**P**ACIFIC Lighting Corporation is predominantly a natural gas system, gross revenues for 1935 being derived about 81 per cent from gas, 17 per cent from electric, and 2 per cent miscellaneous. The system does not, however, produce natural gas, but acts as a distributor, purchasing all its requirements under long-term contract with oil companies and other producers located in some 28 fields within the area which it serves. About one quarter of the company's gas is obtained from the Kettleman Hills fields and since the resources of this field have hardly been tapped, it furnishes a large reserve for future use.

A network of pipe lines interconnects the various system properties, except for a few small communities serviced by butane gas plants. Artificial gas works of large capacity are, however, maintained in Los Angeles and two other cities for emergency and special service.

Some 265 municipalities in southern California are serviced (covering an area of 38,500 square miles with rapidly growing population). The only electrical service performed by the system is in Los Angeles, where the Los Angeles Gas & Electric Corporation competes with a municipal system. Electric plants use gas supplied by the company's own system and the economies thus obtained have enabled the company to compete with the tax-exempt municipal system.

The company's business is largely residential, about 65 per cent of gross revenues being from domestic gas sales and 14 per cent from domestic electric sales. Gas is quite generally used for house heating in southern California, and while domestic consumption of gas and electricity is only about half the total volume in physical units, it accounts for nearly four fifths of the revenues.

The earnings record during recent years has been as follows per share:

1931 .....	\$3.57
1932 .....	3.03
1933 .....	3.28
1934 .....	2.72
1935 .....	4.35

**T**HE substantial improvement in 1935 net was due to a gain of 14 per cent in gross revenues from domestic and commercial sales of gas, together with a 23 per cent gain in industrial revenues. Cold weather played an important part in these gains and the comparison is more striking because the previous period had been the warmest in twenty years.

Net for 1936 will be affected by reductions in gas and electric rates effective in February which will, it is estimated, save consumers about \$2,320,000 annually (which amount would be equivalent to about \$1.44 per share, al-

though this may be partly offset by increased use of gas and electricity). A favorable factor is the saving in interest charges resulting from 1935 system refunding operations, which on an annual basis would amount to about \$1,145,000. This saving would appear to be an offset to any loss due to rate reductions, but it is difficult to make any exact estimate for 1936. The report for twelve months ended March 31st showed \$4.23 compared with \$4.35 for the calendar year 1935, the decline presumably reflecting waning influence of the weather factor.

The company is not affected by the Utilities Act of 1935, the SEC having granted exemption; its operations are intrastate and the equities in its six subsidiaries are wholly owned (directly or indirectly) with the exception of less than 1 per cent minority interest in one company.

In addition to its own system holdings, the company owns substantial blocks of the common stocks of Pacific Gas & Electric Company and Pacific Public Service Company (the latter controlled by Standard Oil Company of California).

Two factors which may have some effect on future earning power are (1) Los Angeles franchise negotiations, and (2) Boulder dam power.

**T**HE Los Angeles Gas & Electric Corporation has for some years been involved in litigation with the city of Los Angeles regarding its franchise rights to serve customers with gas and electricity for purposes other than lighting. The city has long been anxious to acquire the electric property of the corporation either by negotiation or (more recently) through condemnation proceedings. Later negotiations have involved a proposed agreement by which the city would have the right to buy the electric properties, and in return would grant new franchises.

Regarding Boulder dam, the company has contracted to purchase electricity equal to about one half of its present demand. The cost of such power can-

not be accurately computed because of the variety of factors set up in the contract with the Federal government, but according to the 1935 annual report "it is not anticipated that any material advantage or disadvantage will result to your company as regards the cost of purchasing this power in comparison with the present cost of producing it by steam." While the municipally owned electric systems in Los Angeles, Pasadena, Glendale, and Burbank have also contracted for electricity from Boulder dam, it is thought that these companies will not benefit thereby with respect to cost and that competition of Boulder dam electricity will not affect the company's sales of gas, particularly as gas is faster and more flexible and Pacific Lighting has reduced its rates.

**T**HE principal reason why competition from Boulder dam is not feared is the cost of bringing the electricity to the distributing companies' substations, plus the expense of amortization of equipment as fixed by government contract. It may be remarked parenthetically that Boulder dam was started under the Hoover administration and the accounting standards employed in fixing the sale price of electricity appear to be on a more logical cost basis than is the case (thus far) with TVA.

Pacific Lighting \$6 preferred is currently selling on the San Francisco Exchange at about 107 (callable at 105) to yield about 5.60 per cent; the dividend was covered nearly seven times in 1935. The common, selling currently around 52 on the New York Stock Exchange (range this year 47½-56½), returns a yield of about 4.6 per cent, based on the current dividend rate of \$2.40. The company has had an unbroken dividend record almost since organization in 1907. Stock dividends of 10 per cent in 1922 and 80 per cent in 1924 were paid and in 1927 the stock was split 10 for 1. Dividends equivalent to \$30 a share on the old stock and \$3 on the new were paid during the period 1928-34, but as

## PUBLIC UTILITIES FORTNIGHTLY

the dividend was not fully earned in 1934, the rate was reduced and despite last year's recovery of earnings remains at the reduced level.

### *Construction Budgets for the Electric Industry*

ACCORDING to an estimate prepared by Wm. R. Carpenter, economist of the Edison Electric Institute (*Financial World*, June 3rd), private and municipal electric power companies will spend some \$165,000,000 for new construction in 1936 compared with \$170,000,000 last year, \$130,000,000 in 1934, and an average of about \$750,000,000 in the decade 1923-32. Federal government expenditures for enterprises in which electricity is involved amounted to about \$80,000,000 last year compared with \$60,000,000 in 1934. No estimate was presented for Federal expenditures in 1936.

Regarding the question of present surplus capacity, Mr. Carpenter states that the present excess is very badly distributed, with the largest surplus in the western farm region. On the Pacific Coast there is little or no excess at present, but Boulder dam and Bonneville will probably satisfy future requirements for some time.

The principal revival of construction activity by private companies, therefore, seems likely in the East. In so far as increased industrial output reflects working of extra shifts in manufacturing plants (rather than installation of new machinery) such increases will merely mean longer daily use of existing utility equipment, since peak load would not be increased. While the construction of new homes is an important factor in larger domestic consumption, Mr. Carpenter points out that the reversal of the depression practice of family "doubling-up" has resulted in an increase of some 900,000 domestic customers since 1932 and represents a non-recurring factor that has deluded many people into thinking that the expansion of electric service is once more going on at predepression rates.

### *Reviews on Utility Finance*

AT this period of the year it is customary for several financial magazines to issue special utility numbers. The *Analyst* of June 5th contains the following: "Longer Term Influences Favorable to Higher Utility Price-earnings Ratios"; "New Deal Policy Aimed at Socialization of the Nation's Power Resources"; "Utility Net Income about 7 Per Cent above 1935; Further Heavy Refunding"; "Fate of Privately Owned Utilities Hangs on Two Pending Legal Battles"; "Part Played by Holding Companies in Rapid Growth of Power Consumption."

Emerson Wirt Axe in his appraisal of the utility outlook in the *Analyst* concludes that "the longer-term outlook for utility stocks is still a favorable one and that a further advance in this group is likely to occur over the next several years, both absolutely and relatively to other groups of stocks of companies operating in stable-earnings industries."

The *Financial World* for June 3rd contained the following articles: "New Trends in Public Utility Financing"; "Low Rates vs. Appliance Sales"; "The Public's Stake in Our Utilities"; "Surplus Power Capacity—A Myth?"; "Facts about Cheap Electricity"; the magazine also contains a list of companies affected by Federal and state power projects, arranged by major groups, together with a map showing location of the principal projects.

The Federal Power Commission has recently issued a very complete booklet (with charts and maps) describing the corporate relations of electric systems and the location of their properties.

### *Gains in Electric Output for 17 Systems*

ACCORDING to a compilation based on weekly figures published in *The Wall Street Journal*, the following gains in electric output (over last year) were shown in the ten weeks ended May 23rd (this period includes flood effects),

## FINANCIAL NEWS AND COMMENT

compared with the week of May 30th. The companies are arranged on the basis of their ten weeks' showing:

	10 weeks ended May 23	Week ended May 30
Consolidated Gas of Baltimore	23.9%	24.7%
Commonwealth & Southern ..	19.6%	28.8%
Electric Power & Light .....	18.9%	30.7%
Niagara Hudson Power .....	18.5%	27.0%
Southern California Edison ..	17.7%	16.2%
Detroit Edison .....	16.2%	30.4%
Pacific Gas & Electric .....	15.2%	8.9%
American Power & Light ....	15.0%	21.4%
National Power & Light ....	13.7%	6.6%
American Water Works ....	13.5%	17.6%
Average for U. S. ....	12.9%	18.0%
United Gas Improvement ....	12.3%	16.4%
Associated Gas & Electric ...	11.3%	16.3%
Standard Gas & Electric ....	10.6%	22.6%
United Light & Power .....	10.6%	15.5%
North American Co. ....	10.2%	14.6%
Public Service of N. J. ....	9.9%	17.9%
Consolidated Edison of N. Y.	8.2%	8.4%

### New Financing

NEW issues in the fortnight ended June 5th included \$55,000,000 Brooklyn Edison 3½s, \$22,000,000 Peoples Gas Light & Coke first and refunding 4s, \$25,000,000 Wisconsin Public Service first 4s, and two issues of El Paso Natural Gas—\$7,500,000 first 4½s and \$3,750,000 convertible debentures 4½s. Pending issues with probable offering dates (as indicated by registrations) are:

June 13th, \$10,000,000 California Water Service Company first "B" 4s of 1961 and \$500,000 serial notes of 1937-46 (Dean Witter & Co.); June 15th, \$32,000,000 Wisconsin Power & Light first "A" 4s of 1966 and \$3,700,000 serial debentures 4s, 1937-46 (Field Gloré & Co.); June 22nd, \$32,493,000 Niagara Falls Power Company first 3½s of 1966 (Morgan Stanley & Co., Inc.); June 24th, \$10,000,000 Broad River Power Company first mortgage bonds of 1966 (Halsey Stuart & Co.). Other issues listed in Dow Jones' calendar, timing of which appears indefinite, are: \$20,000,000 Oklahoma Natural Gas first 4½s of 1951 and \$10,000,000 convertible debentures of 1946 (also 22,200 shares convertible 6 per cent preferred

and 133,200 shares common); \$9,000,000 Central Maine Power Company first 4s of 1966; \$12,500,000 Montana-Dakota Utilities Company first 4½s of 1956 and \$2,450,000 serial debentures of 1937-43.

Potomac Electric Power Company (North American System) on June 6th filed registration for the issuance of \$15,000,000 first 3½s due 1966. On the same date Western Massachusetts Companies of Boston registered \$11,000,000 3¼ per cent notes due 1946.

### TV A's Subsidized "Yardstick"

PRESIDENT Willkie of Commonwealth & Southern Corporation, in the annual report for 1935, stated:

It is gradually being realized that the lower electric rates charged in the limited area in which the Tennessee Valley Authority is now operating, either directly or indirectly through municipal plants, are made possible only by additional taxes paid by people in all parts of the country. . . . This extraordinary situation becomes the more difficult to understand when it is realized that our operating companies in that area could lower their rates at least 25 per cent below the Tennessee Valley Authority rates if they were given the same gifts from the Federal Treasury as are given to the Tennessee Valley Authority. . . .

The feeble nature of the claim that the Tennessee Valley Authority was created for navigation is indicated by the fact that there is no place in the Tennessee valley that is not now adequately served by hard surfaced roads and railroads. . . . Furthermore, the Army Engineers rendered a report to the Secretary of War that development of the Tennessee river for navigation if desired could be done by the construction of low-head dams, which, according to such report, would cost less than 20 per cent of the cost of the high-head dams now being built by the Tennessee Valley Authority.

The fallacy of the claimed flood control program is substantiated by the fact that citizens of Chattanooga . . . recently petitioned Congress for an appropriation of \$15,000,000 for the construction of levees to protect their city against flood damage.

On May 29th nineteen subsidiaries of Commonwealth & Southern Corporation and other utilities in the Tennessee valley area, filed actions in the courts attacking the constitutionality of TVA.



# What Others Think

## The Power Industry Fights Back

WHEN nineteen privately owned electric utility companies operating in the Tennessee valley area joined forces recently to challenge in the courts the constitutionality of the Tennessee valley project along broad lines, it was notice to the world that a fairly good section of the power industry had decided to unite in a fight to the finish against Federal invasion of their industrial field. Less popularly noted but perhaps more significant was the evidence displayed at the recent annual convention of the Edison Electric Institute at St. Louis that practically the whole industry is now mobilizing not only on the TVA front but along general lines.

The United States Chamber of Commerce, representing business generally, also appeared in the person of its president, Harper Sibley, as an ally. Explaining his position, Mr. Sibley told the St. Louis convention that it was only reasonable to suppose that the competition now being imposed on the electric industry by the Federal government might later extend to other industrial fields. He stated:

Your industry is the guinea pig for this hazardous experiment, but other types of industry could not blink at the implications of it. If the entrance of government into the field of producing and distributing electric power could be justified in principle, it would require no stretch of conscience to project it into other fields of business. For this reason, what happens to you is of momentous concern for all business.

In the case of the public utilities this experiment cannot be justly labeled a competitive test of efficiency. Extended, it becomes a war of extinction, as deadly in its effects as that which would be waged if one army were equipped with artillery and machine guns and the other with bows and arrows. To spend billions of dollars of public money, to set up Federal authorities all over the country to dictate power rates, to

subsidize states, cities, counties, and districts can hardly be said to be an impartial way of determining whether government management is more capable than private management. The issue of such a conflict, in the long run, will not determine which is the better, but how long the one can survive.

In the interest of taxpayers generally, Mr. Sibley also expressed the hope that publicly managed utility operators, particularly municipal plants, would be placed under regulation.

THE retiring president of the Edison Electric Institute, Thomas N. McCarter, sounded a more optimistic note, when he stated his opinion that the peak of the government's attack on private electric utility industry had passed. He said:

There never was any real basis for it except a few isolated cases of the mishandling of securities by certain manipulators and promoters, the wrong-doing of whom is in no sense chargeable to the industry as a whole. The issue, so far as it was an issue, was one that was politically manufactured. The public are beginning to see that there is nothing in it, and evidence abounds that the great mass of the people in this country are thoroughly satisfied with the service rendered by the industry and the extremely low prices charged for such service,—which have now reached in the case of residential customers an average cost price to them of less than 10 cents per day.

In this note of moderate optimism which I am striking in feeling that the worst is behind us, is a belief that the time has come when even the United States government cannot go on wasting billions of dollars of the people's money in the fashion that has been going on for the last three years, and that boondoggling is not to have a permanent place as one of the great national sports of our country.

Restating his belief in and respect for proper and reasonable regulation for public utilities, Mr. McCarter paid tribute to the industry for resisting "persecution" by government agencies:



## WHAT OTHERS THINK

Here is an industry which throughout its entire history, including the period of the great depression, has been constantly lowering its rates of service to the public, notwithstanding the tremendous burdens of taxation and otherwise that have been laid upon it, being attacked by a government which has itself spent not millions but billions of the taxpayers' money in unprecedented fashion, in furtherance of its various fantastic notions, many of which have already been declared null and void by the Supreme Court. I challenge comparison of the record of the electric industry in the regard of which I have spoken, with any other industry in the country. Its experience has been unique and reflects the greatest credit upon it.

What the attitude of the trustees of the Institute in the future in regard to these matters will be, I do not pretend to say. But having put our hand to the plow, I do not think we should stop until these questions are all finally and fundamentally determined.

THE most outspoken critic of governmental attacks on the private electric industry came from President Frank T. Post of the Washington Water Power Company. Mr. Post scathingly denounced what he regarded as duplicity—the conduct of the New Deal in: (1) taxing and drastically regulating almost to the point of destruction ("death sentence") the privately owned electric utility while exempting municipal plants and other publicly owned utilities from similar burdens; (2) embarking on a vast program of competitive power projects such as TVA, the Columbia river development, and the proposed gigantic Mississippi Valley Authority; (3) financing municipal utility ownership through Public Works Administration loan grants disguised as employment relief measures; (4) inducing state governments to join in the campaign against the privately owned electric industry by preparing state legislation in Washington to facilitate public ownership with Federal financing. Mr. Post concluded:

In this very brief summary of a few events I have undertaken to demonstrate that for the past three years there has been evolved and developed by the inner circle of the New Deal a plan or plans to hamstring, strangle, and destroy all the electric utilities, big and little, in this country, with

public ownership and political operation as the ultimate end in view. But we need not be disheartened. We know that demagogues thrive best in times of distress. We know that the American people are honest, fair-minded, and intelligent. We know that the American people, now as always heretofore, are opposed to government in business and that they are not likely to accept paternalism, socialism, fascism, communism, Hitlerism, or any other ism except Americanism. We know and our customers know that the electric service furnished by the utilities is the best in the world and that our customers get more real value for their dollars paid to the utilities than they get for any other dollars paid for any other commodity or service.

In the past the utility executives have felt that their sole function was to build power plants, transmission lines, and distribution systems, and to sell electric energy and give the best possible service at reasonable rates. Now it is apparent that they have another job. They must keep the public fully informed about the things I have mentioned and about all other matters in which the public may be interested and which have any relation to the utility business. They must do this frankly, accurately, fairly, courageously, and frequently—in fact, almost continuously. If they do, the demagogues will be compelled to hunt for some other political football.

C. W. KELLOGG, the newly elected president of the Edison Electric Institute, dealt mostly with the financing of electric utilities but he did touch on government relations with the industry when he discussed the function of holding companies. Pointing to the fact that other businesses average about 71 cents of plant investment to every dollar of gross revenue as against \$5 of plant investment per dollar of gross revenue in the electric industry, Mr. Kellogg said this high investment ratio is one of the fundamental factors that makes the utilities a natural monopoly since investors would not dare to risk so much capital on a competitive venture. For the same reason, in times of normal growth, for an electric utility, the need for new capital is not occasional but a "hardy perennial." Filling this need is aided greatly by the holding company, according to Mr. Kellogg, who gave the following analysis of the sources of funds for plant expenditures by operating subsidiaries of 13 leading

## PUBLIC UTILITIES FORTNIGHTLY

holding companies from 1925 to 1930 inclusive:

Total Plant  
Expenditures .... \$3,071,000,000 or 100%

This was raised as follows:

### 1. By Operating Companies

(a) Through sale to the public of their own securities .....	\$1,478,900,000	48.1%
(b) Through investment of appropriations to retirement reserve	530,900,000	17.3%

Total Operating  
Companies ..... \$2,009,800,000 65.4%

### 2. By Holding Companies

(a) Through sale to the public of their own securities .....	\$794,100,000	25.9%
(b) Through net earnings withheld from common stock ...	267,100,000	8.7%

Total Holding  
Companies ..... \$1,061,200,000 34.6%

Without this essential equity base of 34.6 per cent the huge investment program either could not have been financed at all or would have been financed at the price of destroying the soundness of the whole structure of operating utilities. Concerning the regulation of holding

companies, Mr. Kellogg observed:

I have always felt and still do that the evils that have arisen in the past in connection with holding companies should be regulated by the Federal government, but I object to the Alice in Wonderland method of "Off with his head," as the universal way of regulating matters. It is often easier to kill something than to regulate it but it is not always the most intelligent solution. Before the government destroys the public utility holding companies, it should have a clear idea of how the function they perform can be performed by the small parts into which the "death sentence" would break up their properties. It should be sure of the answer it can make in later years to the consumer whose electric service suffers or fails for lack of equity financing. It should decide beforehand what it will say to the bond investor as to where he is to look for the protection of his bond. It should study carefully and with open mind, not blinded by hate, the figures I have given as to what the holding companies have actually done before ruthlessly destroying such a useful public servant.

The balance of Mr. Kellogg's address was given over to an analysis of the general financial condition of the electrical industry as a whole.

—F. X. W.

ADDRESSES by Harper Sibley, Thomas N. McCarter, C. W. Kellogg, and Frank T. Post before the Convention of the Edison Electric Institute, St. Louis, Mo., June 1 to 4, 1936.

## Governor Landon's Record on Utility Questions

Now that both major political parties have their presidential candidates out in the open, the season is at hand for examining the record of the candidates to find out where they stand on various particular points. Inasmuch as President Roosevelt's record is pretty well established and his position on different matters of interest is quite generally known, the examination of candidates in this campaign becomes a more or less one-sided procedure.

Bankers, for example, want to know what is Governor Landon's position on banking. Educators want to know

about Governor Landon's views on schools. And so on down the line of different groups, businesses, and classes. Not very far down the line are those especially interested in utility regulation and public ownership of utilities. How does Governor Landon stand on utilities?

Governor Landon will probably furnish some light on the subject himself before the campaign is over. Meanwhile, however, the best we can do is to "look at the record" and guess. The record, it must be admitted, is rather barren. Governor Landon has never

## WHAT OTHERS THINK



*The Sun, Baltimore*

### SAVED FROM A WATERY GRAVE

been very talkative. His political experience has not happened to embrace much contact with utility regulation except through routine administration as the governor of the state of Kansas.

Judson King, director of the National Popular Government League, has

been pretty industrious in digging up the record of all possible candidates on the utility question. However, the interesting material developed by Mr. King on Senators Borah and Vandenberg, Publisher Frank Knox, former President Hoover, and others, is, for

## PUBLIC UTILITIES FORTNIGHTLY

obvious reasons, of no consequence at this writing. His sketch of Governor Landon's background on utility matters becomes, by the same token, of more timely interest.

MR. King begins his account in 1928 when Governor Landon was managing the successful campaign of Clyde M. Reed for governor of the state of Kansas. It appears that Governor Reed and his Democratic successor, Governor Harry M. Woodring (now Assistant Secretary of War) conducted a vigorous fight on Kansas utility interests for the purpose of procuring lower utility rates and more stringent utility regulation. This activity, according to Mr. King, split the state Republican party into liberal and conservative wings which in 1932 the candidate for governor, Alf Landon, sought to unite. There was a party platform plank adopted by the Kansas Republicans that year which Mr. King believes was virtually dictated, or at least approved, by candidate Landon:

We reassert our belief in strict, careful, and intelligent supervision and regulation of all public utilities in *fairness both to them and to the public*. We call attention to the bills proposed by Republican members of the last Kansas legislature and enacted into law by it with Republican majorities in both house and senate, giving the public service commission power to regulate holding companies and placing on utilities the expense of public service commission hearings and investigations when the utility is found to be in the wrong. (*Topeka Daily Capital*, August 31, 1932, p. 2.)

The italics were supplied by Mr. King who evidently finds the proposition that utility regulation should be fair to both sides sufficiently remarkable to emphasize. Mr. King confesses some doubt as to the wisdom of compelling utilities to pay for investigations and especially all the costs of maintaining regulatory commissions. However, he dismisses it as a moot question.

IN any event, Governor Landon was elected in 1932 after a three-cornered fight involving former Governor

Woodring (Democrat) and Dr. Brinkley (Independent). Mr. King says it had generally been supposed that Dr. Brinkley was supported by Kansas utility interests but he quotes some apparent innocuous correspondence between utility officials which establishes to his satisfaction that the utilities were not exactly downcast by Governor Landon's victory.

Mr. King also quotes an interesting paragraph from the Landon biography "Deeds, Not Deficits" written by Richard B. Fowler:

When Governor Landon took over the office he appointed as chairman of the corporation commission even-tempered, soft-spoken Homer Hoch. The sword was to be exchanged for table silver, the council table to replace the battlefield. Kansas entered a period of new utility legislation with teeth in it and a general reduction in rates.

The story is in figures of savings based on the normal past consumption in each case where a reduction was made. It affected most of the 350 utilities in the state and adds up to an annual saving to the people of Kansas of about \$1,778,500.

A bill assessing the utilities for the cost of a state department to control them aroused resistance that did not break down until the second session of the legislature. Naturally the utilities opposed a law that provides the state engineers and lawyers who can keep up with the facts, a permanent weapon.

Another pertinent quotation was the paragraph on public utilities contained in Governor Landon's message to the Kansas legislature in 1933:

Modern conveniences and modern living have added complications to the part the state must play in supervising and regulating certain private enterprises. Next to taxes, which are levied for the purpose of meeting the expenses of government, the rates paid by consumers for the services rendered by the public service corporations deeply concern such patrons and should receive the careful attention of the state. We should give consideration to proposals that will strengthen the public service commission for aggressive action to insure just treatment alike for the public utility operators and the citizens of Kansas who pay for the service. (*Sen. Journal*, 1933, p. 16.)

MR. King, in his capacity as a liberal reformer, questions the activity of Governor Landon in merging,

## WHAT OTHERS THINK

for purposes of economy, the Kansas Public Service Commission, the Blue Sky Law Commission, and the State Charter Commission into a single state corporation commission, especially since it resulted in the elimination of former Public Service Commissioner Thurman Hill who won Mr. King's admiration by his vigorous antiutility record. However, as Commissioner Hill, aside from his admitted capability, had been a Democratic appointee of ex-Governor Woodring, the fact that Republican Governor Landon superseded him with a Republican appointee upon the reorganization of the commission did not seem remarkable to Kansans as such political matters go. In any event the Kansas citizens must have approved the economy angle since they reelected Governor Landon on an economy platform in 1934. Mr. King concedes that Governor Landon signed two acts of the legislature which resulted in Federal financing for municipal plants and stricter regulation of intercorporate financial transactions of utility holding companies.

However, Mr. King tells us that Governor Landon's record is not sufficiently antiutility to suit him. He disputes claims made by Biographer Fowler that commission regulation has accomplished \$1,778,500 savings through utility rate reductions under the Landon administrations. He points out that these reductions were voluntarily made by utilities through peaceful negotiations. Evidently Mr. King does not think a utility rate reduction should count for much unless it is procured by a commission figuratively beating a utility over the head. He states:

Without seeking to deflect credit from Governor Landon for his work in the field of state regulation, a candid analysis of the records shows that the long-standing political front of the utilities was first broken by Reed and Woodring, who were broken by them in turn; that the important utility laws and investigations were made under Woodring; that without his vigorous leadership and that of Commissioner Hill it is reasonably certain the Republican legislature would not have passed these acts; that Landon has simply continued the work of

his predecessors in a none too vigorous fashion, and finally Biographer Fowler, following the ancient American practice of such campaign authors, has claimed too much for his hero and left many things unsaid.

THE blackest mark which Mr. King finds against Governor Landon's name, however, was the fact that in 1934 the governor actively opposed the establishment of a municipal electric plant in his own home town of Independence, Kansas (population 13,000). Mr. King does not reveal just what Governor Landon's reasons for his position were or whether the proposed municipal plant was an indisputably desirable proposition.

Governor Landon sent a telegram to President Roosevelt in 1934 urging the enactment of the Johnson Act to remove jurisdiction in utility rates from lower Federal courts:

It is the most constructive piece of utility legislation, in my judgment, that has been offered in the last decade. The theory of rate regulation by state commissions has been made a mockery by the delays, evasions, and general obstructive tactics permitted in the lower Federal courts. Certainly our state courts and the United States Supreme Court may be trusted to consider these questions with equity and with justice and to protect property rights as well as public rights. (C. R. Vol. 78, p. 2440.)

Aside from this passing development, Mr. King searched in vain for any pronouncement from Governor Landon on national utility issues or any definite indication of his position on such matters as the Federal Trade Commission investigation, Federal Power Commission policies, TVA, the Holding Company Act, the Securities Act, or rural electrification.

So Mr. King concludes:

On the basis of his official acts, utterances, and silence, it would appear that Governor Landon is a moderate advocate of state regulation of utilities who has mildly carried on policies inaugurated by his predecessors, Reed and Woodring; is opposed to local municipal ownership; has been as silent as Coolidge on the shocking utility and lobby investigations of the past eight years which have stirred the nation, and has said



## PUBLIC UTILITIES FORTNIGHTLY

nothing on nationally important utility legislation and policies. In view of his conspicuous silence and the well-known active support his candidacy is receiving from utility interests of all kinds nationally, it seems safe to predict that if elected President the present power policies supported by progressives of all parties would not receive his support.

Still more to the point is Mr. King's summary of Governor Landon in rounding up all the candidates:

*Landon:* Is a mild state regulationist who has remained silent on national utility issues; backed laws giving the state corporation commission control of "up-stream" loans to holding companies and making utilities pay cost of commission; opposed a municipal power plant in his home town; was supported by utilities in his 1932 campaign. Harding was nominated by oil, Hoover by power, both are now working for Landon which indicates his utility policy if elected.

Mr. King's detailed text may not seem to some to support his conclusions about power and oil backing Governor Landon. However, that is a matter of personal judgment. For comparative purposes here is Mr. King's summary of his favorite candidate, President Roosevelt:

*Roosevelt:* Has fought for increased use of electricity through lowered rates; believes power sites now owned by the public should be developed by the public; is not a public ownership man, *per se*; wants yardstick plants as a regulatory force by example, not competition; sought to protect investors; has an engineer's vision of water and ero-

sion control through regional and national planning; is bitterly fought by all the utilities. If reflected would go ahead.

AND speaking of comparisons. Here is a brief comparison of the two candidates of a more general nature drawn by the noted *Baltimore Sun* political commentator, Frank Kent:

Mr. Landon is as deliberate as Mr. Roosevelt is impulsive. He is as plain as his opponent is showy. According to those who know him best it is pretty fundamental in Mr. Landon to feel that when you do not know what is the right thing to do the sound thing is to do nothing until you find out.

The reverse of that is Mr. Roosevelt's personal philosophy, enunciated in his Baltimore speech and on other occasions. In effect, it is "do something, keep doing something no matter what, but do something. If one thing does not work, try another, but keep doing something." There could hardly be a more clear-cut choice.

And so it goes. Opinions differ, of course, but despite the industry of Mr. King and others who are so fervent in their preoccupation with the so-called utility issue, advance reports on the campaign do not indicate that the utility issue is likely to be a major issue.

—F. X. W.

UTILITY RECORDS OF THE PRESIDENTIAL CANDIDATES. By Judson King. The National Popular Government League, Washington, D. C. 55 pages, 25 cents.

REPUBLICAN CONVENTION NEWS. By Frank Kent, *Baltimore (Md.) Sun*. June 19, 1936.

## Will Electric Rates Keep Going Down Indefinitely?

AN interesting group of papers on the subject of utility rates (particularly electric rates) were presented at the recent annual convention of the Edison Electric Institute in St. Louis, Mo. Vice President W. G. Vincent of the Pacific Gas and Electric Co. started the ball rolling with a penetrating discussion of that most timely problem—rate reductions. He said in part:

Early in the infancy of the electric indus-

try these fundamentals were understood. Prior to 1900 Hopkinson and Wright, in England, and Greene, in the United States, enounced the principles of the economy of the business, and the basic truths which they discovered are unchallenged today. They saw clearly the difference between the electric industry and the mercantile establishment, not only in the character of their commodities but also in the vastly different financial structure required for their operation.

Rates in those days moved rapidly downward as the principles of the business were



## WHAT OTHERS THINK



The Raleigh Times

### LOW BRIDGE!

disseminated among the operators. And this was not an effect of governmental regulation. No such regulation existed. Reduced rates were thus not the cause of the industry's growth but the necessary condition of its survival in a competitive field. Hence rates reacted solely to economic forces; not to regulatory compulsion, nor to the philanthropy of the operators.

Thus, research and invention almost infinitely enlarged the field of usefulness but changed none of the essential characteristics of the enterprise or its dependence upon the

solution of the economic problems of production and distribution. Load and diversity factors took on increasing importance. In the meantime the lighting load grew apace and with it the necessity for further scrutiny of rate schedules. For it was discovered that there was a point at which the minimum lighting needs of the consumer were satisfied; that beyond that point the value of additional lighting service begins to decrease, and that therefore he is willing to pay less and less because of this declining marginal utility. Promotional rate forms recognized

## PUBLIC UTILITIES FORTNIGHTLY

this condition, and again we see behind the rate revisions the motive force of economic principles.

**A**FTER thus tracing the historic evolution of rate changes, Mr. Vincent observed that competition, especially in the power field was another factor that kept driving electric rates downward. The speaker did not wish to imply, however, that regulatory commissions did nothing or that they were not necessary. On the contrary, he admitted the desirability of regulation on the basis of restraining overzealous management, working for greater uniformity and simplicity in rate structures, and maintaining proper service standards.

At this point Mr. Vincent concluded that similar "economic" influences will continue to shape rates and rate policies in the future and by the same token he warned against the intrusion of "political" influences. In plain words, rates developed by economic laws are necessarily sound rates. Rates dictated by political necessity may not be so sound.

For example, there is the now prevailing pressure to force electric rates lower on the theory that subsequent increased consumption will continue to yield increased gross revenue and even increased net revenue. Mr. Vincent stated on this point:

There are cases where a relatively small decrease in the rate when accompanied by suitable merchandising activity will produce a large increase in volume and an increase in gross revenue and even in net revenue. Because of success in a few instances, the industry's critics have jumped to the conclusion that the same thing could be done indiscriminately. They speak of a "hump" to be got over and of "breaking the log jam" as if all that were needed were a rate reduction to unloose such a flood of additional use that not only would the gross revenue be promptly restored, but that even the net position might be at least as good as before.

We must not, however, jump to the conclusion that a rate reduction in any case will pay for itself. The circumstances of each case must be carefully considered. In the domestic and especially in the heating and cooking field a most important consideration is the price at which competitive fuels are available. Unless the contemplated rate reduction can be made sufficient to compete

with these fuels, after due allowance for the incidental advantages of electricity, it may be futile and little or no stimulation result. This is very likely to be the case in cities supplied with natural gas for domestic use.

**M**R. Vincent gave specific examples of the effect of the availability or lack of availability of competitive fuels in electric consumption in Winnipeg, Canada, central California, and concluded that only where economic situations justified should electric rate reductions be attempted.

On the subject of competitive fuels, Vice President N. R. Gibson of the Buffalo, Niagara and Eastern Power Corp. went into more detail. First of all he distinguished between the small and large consumers:

The average domestic consumer uses only a small amount of electric energy. He, therefore, may consider that the supply of his requirements of energy for lighting and appliances such as flat irons, washing machines, vacuum cleaners, radios, and so forth, which use only relatively small quantities of electricity, is monopolistic in character.

The larger domestic consumer, however, rests secure in the fact that his requirements of energy for use in refrigerators, cooking ranges, and hot water heaters can be supplied from competitive sources—oil and gas. Further, these are so highly competitive that they act as a leaven which exerts a strong influence on the general price level of electricity used for all domestic purposes. This fact will be made clearer by reference to the relation between the prices for gas and electricity for cooking ranges and hot water heaters. For instance, when the price of electricity for heating water is 1½ cents per kilowatt hour such price is equivalent to \$1.50 per thousand cubic feet of artificial gas having a calorific value of 540 B.U.T. per cubic foot. It is equivalent to coal for this purpose at \$38 per ton. When used for cooking ranges, electricity at 1½ cents per kilowatt hour is equivalent to 97 cents per thousand cubic feet of artificial gas.

**B**ECAUSE of the varying competitive situation, as well as the consequent variations in physical structures of different plants, Mr. Gibson declares that the determination of standard formulas for cost of distribution of electricity to one class of consumers is impossible. This is a particularly timely point because of the intensive studies being

## WHAT OTHERS THINK

made by the Federal Power Commission which is expected to report thereon within the next few weeks. Mr. Gibson stated:

There is no particular difficulty in ascertaining the amount of money required to purchase and install one kilowatt in generating plant capacity. Nor is there much difficulty in determining what fixed charges will be incurred in the way of taxes, depreciation, and interest. The cost of generating the kilowatt hour may be determined with fair accuracy, knowing the volume of the output, load factor, and the operating conditions. As soon, however, as an attempt is made to allocate these costs among various classes of customers with varying demands and different characteristics of use and changing in their relationship almost daily, then the difficulty begins. Class demands do not occur at the same time but at various times during the day. The demands of the several classes change materially with the seasons. One kilowatt of demand by a class of customers does not mean that one kilowatt of plant capacity is required for that class. It may require one or considerably less than one kilowatt of plant capacity to serve that class, depending upon the diversity of the demands of the several classes served. Large industrial loads may be taken on with no increase in plant capacity at all. They may mean simply the filling up of valleys in the load curve. The cost of plant capacity and hence the cost of fixed charges for a certain class of service will vary over a wide range under varying conditions. Of course, no class of customers or no class of service should be a burden upon other classes. Each class should pay all of the additional cost incurred to serve that class and in addition contribute something towards the reduction of the total average cost so that all classes may share in the benefit of the additional load.

As to specific examples of competitive fuels influencing electric utility rates, Mr. Gibson gives the following table:

### AVERAGE ANNUAL USE PER RESIDENTIAL CONSUMER—1935 KILOWATT HOURS

#### Less Competitive Fuel Areas

Ontario Hydro Commission .....	1,720*
Ottawa (municipal) .....	3,912*
Winnipeg (municipal)	
Lighting (100% of customers) .....	657
Cooking (62% of customers) .....	2,123
Water Heating (49% of customers) .....	5,410
Seattle (municipal) .....	1,050*

\* For year 1934.

#### Less Competitive Fuel Areas—Cont'd.

Tacoma (municipal)	
Excluding house heating, 1,250 }	
House heating .....	6,900 }
Spokane (private) .....	1,727*
Washington state .....	1,172
Oregon .....	1,122
Idaho .....	1,220
Niagara Falls, N. Y. ....	1,842

#### Competitive Fuel Areas

Los Angeles, Cal. (municipal) .....	575*
California .....	728
Ponca City, Okla. (municipal) .....	530*
Oklahoma .....	634
Buffalo, N. Y. ....	883
Arkansas .....	583
Louisiana .....	541
Texas .....	658

Of course there are still plenty of reasons for increased use of electricity as a means for lowering the cost. On this point Vice President G. E. Whitwell of the Philadelphia Electric Co. clearly reflected the ambition of the industry to sell its service as generously as possible:

Our industry has never subscribed to the economic doctrine of scarcity. Every important move that it has made demonstrates the truth of this statement. On the contrary, the constantly decreasing unit cost of electric service has resulted from successful efforts along the lines of load-building—a form of wealth creation. This example of cause and effect has proceeded over the years at a constantly accelerating tempo, until today, in many parts of the United States, amazing accomplishments, particularly in residential load-building, are being witnessed. Yet something more is needed—something still more greatly opposed to that doctrine of scarcity which is typical of those governmental policies which are responsible for many of the difficulties which beset us and for which remedies must be found.

We are all pretty much agreed that the selling of more kilowatt hours, with their attendant reduced unit prices, still remains our best single defense against attack. While all fields of electric utilization are important, it is probably true that residence consumption is more immediately responsive to intensive sales effort and will produce more rapidly the required greatly increased consumptions of electricity. Similarly, in the domestic classification, while all electricity-consuming devices are important and helpful, two stand out as possible of producing consumptions sufficiently large to permit us, quickly enough, to remedy our difficulties and meet the attacks against us. These two are the electric range and the electric water heater—the kitchen twins which, with good lighting, the refrigerator,

## PUBLIC UTILITIES FORTNIGHTLY

the dish washer, the clock, the exhaust fan, numerous other electric appliances, adequate and convenient cabinet and working spaces, and attractive and serviceable floor and wall coverings, constitute the modern kitchen.

No discussion of this general subject would be quite complete without some consideration of the effect of public and private ownership on electric rates and electric consumption. President J. F. Owens of the Oklahoma Gas and Electric Company contributed an important and not very well-known fact on this point. His studies of municipal electric plants in Oklahoma would indicate that the municipal plant rates are generally higher than private electric utility rates in the same state. He stated:

Before allowance for taxes, residential electric rates in municipal plant towns in the same size communities in Oklahoma average from 5 to 35 per cent higher than our company, as follows:

<i>Municipal Higher</i>			
25	40	100	250
Kw. Hr.	Kw. Hr.	Kw. Hr.	Kw. Hr.
6%	5%	29%	35%

After allowance for taxes on the basis of taxes paid in towns of similar size the weighted average difference ranges from 20 to 55 per cent, as follows:

<i>Municipal Higher</i>			
25	40	100	250
Kw. Hr.	Kw. Hr.	Kw. Hr.	Kw. Hr.
22%	20%	48%	55%

This is an absolutely fair and honest comparison as we have included only those communities in size which have municipal plants, and have not averaged our larger communities above 25,000 population, which would reduce our average, giving us an even more favorable showing.

It will be noted that the difference is greatest in the higher consumption blocks—the segment of usage upon which the Federal goal of an “electrified America” depends. Thus, it is evident that our contemporary public ownership friends have neglected this aspect of the business.

It is significant to note that despite the drive for public ownership, encouraged by the Federal government on the grounds of improving general living standards through increased use of cheap electricity, the municipal plants are resisting rate reductions in the very place where it is most needed—the higher consumption blocks. One wonders if the apparent concessions to small users at the expense of large users, indicated by the municipal plant rates reviewed by Mr. Owen, might not reflect the political expediency. If so, one may wonder further if improved living standards and the “more abundant life” ever will be aided by political management of necessary public utility service.

—M. M.

ADDRESSES by W. G. Vincent, N. R. Gibson, G. E. Whitwell, and J. F. Owens before the Fourth Annual Convention of the Edison Electric Institute, St. Louis, Mo. June 1-4, 1936.

## Notes on Recent Publications

PRINCIPAL ELECTRIC UTILITY SYSTEMS IN THE UNITED STATES. (Power Series No. 2.) Federal Power Commission. Superintendent of Documents, Washington, D. C. \$1 in paper covers; \$1.50 in buckram.

The 57 principal systems and 50 minor systems covered by this report have 90 per cent of the installed electric capacity of the United States; supply 92 per cent of the electric energy available for such systems; serve 89 per cent of the customers, and receive 92 per cent of the revenue from ultimate consumers.

These percentages are based on summaries from reports filed with the Federal Power Commission by 3,260 utilities, of which 1,507 are privately owned operating companies and

1,753 municipal electric systems, covering practically the entire industry.

Covering the principal systems, this report lists the utility holding companies, their intermediate companies, subsidiaries and affiliates, and gives their chief characteristics—general, financial, physical, and electric operating characteristics—and other information.

Printed separately, for convenience in use, and placed in a jacket in the cover are two important parts of the report: (1) A map, in colors, showing the service areas of all the principal utility systems; (2) a large chart showing the corporate relationship of these systems, their subsidiaries and affiliates.

# The Latest Utility Rulings

## Connecticut Commission Overrules Stockholders' Objections to Merger

A PROPOSAL to merge the Stamford Gas and Electric Company with its parent corporation, the Connecticut Power Company, was approved by the Connecticut commission in view of the very definite savings in respect to taxes and other costs of management which would result. The purpose of the merger was said to be to effect economies through savings in taxes by the elimination of intercorporate dividends and through other economies, and to simplify the corporate structure of the Connecticut Power Company and to make that company so far as possible strictly an operating company.

Objections by minority stockholders were overruled by the commission, with the statement:

The approval by the commission is only one incident to the completion of a merger. The statutory formalities falling within the jurisdiction of the Secretary of State must be met and the private rights of stockholders may demand consideration by the courts. The act has always been construed as re-

posing in the commission the responsibility of examining the terms and conditions of a proposed plan of merger or consolidation in an effort to determine whether any part of it may be adverse to the public interest, primarily the interest of consumers. . . . The commission rules that in so much as the ratio of exchange is just and equitable from the public standpoint it cannot undertake to inquire into the private rights of stockholders and may not withhold its approval on any such ground.

The commission determined that the Connecticut Company had charter authority to merge and that, although the Stamford Company had no express authority to merge or consolidate with other corporations, the charter of a constituent of the Connecticut Company contained a provision that companies merging or consolidating with it are "authorized to make such merger or consolidation." Accordingly the commission concluded that the companies had sufficient authority to permit the proposed merger. *Re Connecticut Power Co. et al.* (Docket No. 6311).



## Merger of Gas Companies Approved for Simplicity and Economy

THE Consolidated Edison Company was authorized by the New York commission to merge certain gas companies, all the stock of which was owned by the merging company. Approval was made subject to the necessary qualifications and without prejudice to either the company or the commission in other and subsequent proceedings. Consent was not to be deemed to be a determination of the value of any property for rate-making purposes.

The commission stated the reasons advanced by the Consolidated Edison

Company why the merger should take place as follows:

The operations and management of these companies have been essentially unitary and it is desired to make the corporate structure conform to the operating facts. It is stated that the merger will make for simplification and for an increase in efficiency of operation. Separate books of account, reports, and rate schedules are required for these companies while they operate as distinct corporate entities. The present method of operation requires apportionment of costs and operating charges which are reflected in intercompany accounts. This apportionment of costs and operating charges is complex and would be



## PUBLIC UTILITIES FORTNIGHTLY

eliminated in a merger. The companies' administrative work would be less burdensome due to the elimination of the filing of annual reports with the commission, state tax commission, the Federal tax authorities, and the city of New York.

Certain tax statutes have been recently enacted which will increase the annual expense for taxes of these companies if they continue as separate corporate entities. The principal savings effected would be in taxes.

The Federal capital stock tax would be reduced and possibly the Federal income tax due to the fact that consolidated tax returns cannot be filed. Subsequent Federal tax savings will depend upon the legislation enacted by the government. There are certain city taxes on intercompany transactions which would be eliminated.

*Re Consolidated Edison Co. of New York, Inc. (Case No. 8712).*



### Company without Franchise Cannot Seek Rate Increase

**A**N application for authority to increase gas rates and to establish a minimum rate or service charge, or in the alternative to discontinue service, was denied by the Oklahoma commission upon a showing that the company did not have a franchise to operate.

It was said that the only rights the company had in the town were those which flow from mere sufferance on the part of the state or the town, namely, certain inchoate rights in so far as occupancy of streets, alleys, and other public places in the town are concerned, coupled with a precarious right of serving its present customers until such time as the town refuses to permit it to continue service.

The commission was of the opinion that the company had no standing either in law or in equity that would permit it to file an application for an increase in rates, that before it could do so it must

obtain a franchise in the manner and form provided by the Constitution and laws of the state, thus recognizing the requirements of the Constitution and statutes and thus placing itself in a position whereby the jurisdiction of the commission would attach.

Additionally it was pointed out that a minimum rate or service charge is prohibited by statute. The commission declared that it had no power to alter, repeal, modify, or change in any way or manner an express statute covering the subject.

When no opposition developed to the request to discontinue service and the commission was about to rule on authorization to discontinue, the company protested and refused to accept an order allowing abandonment of service. The commission dismissed the petition. *Re Avant Gas Service Co. (Cause No. 16,915, Order No. 10262).*



### Sufficiency of Complaint against Rates

**A** COMPLAINANT against rates of a public utility company cannot reasonably be expected to have information concerning the rates except the amount paid for services rendered, while on the other hand the utility company has within its knowledge exact and detailed information on the points material to the question. On this theory the North Carolina commission denied a motion by a public utility company to require a petitioner complaining of rates to file a bill of particulars. It was said:

The respondent has in its possession, or should have, a complete and detailed inventory of the costs of all of its properties, both historical and present costs; it knows exactly what its operating cost is; from years of experience it should know how this operating cost should be allocated to its various classes of customers; it knows definitely what revenue it receives from each class of customers; it claims to know the rapidity of depreciation of each and several of its kinds of properties; it has a record of the current maintenance cost of its properties; and it knows what it pays to its officials and employees in the conduct of its business. All of these matters heretofore



## THE LATEST UTILITY RULINGS

enumerated are peculiarly within the knowledge of the respondent company and are matters about which the petitioner could not be expected to have exact and detailed information.

Rulings by the state court that a complaint does not state a cause of action when it fails to allege facts, the knowledge of which is, or should be, in the possession of the complainant, were distinguished by the commission from another line of decisions of the state supreme court. In these it had been held that a cause of action is not defective for the reason that it fails to state in detail facts peculiarly within the knowledge of the adverse party. It had also been held that where the absence of such detailed facts is complained of and a bill of particulars is demanded, the trial judge in his discretion may refuse to require the furnishing of a bill of particulars, if it appears that such details are matters peculiarly within the knowl-

edge of the party requesting the bill of particulars.

The commission, however, granted a motion by the utility company to strike out as immaterial and improper an allegation that "although all other power companies within the state of North Carolina have made substantial reductions in the past two years, no reductions have been made by the Smoky Mountain Power Company." The commission said that it is immaterial and improper either to allege or to consider, in determining what are fair rates of the company, what reductions have been made by other utilities, stating:

The rates of each utility must be determined upon the valuations of the properties, the costs of operation, and the revenues received from and by that particular utility, without regard to what other utilities are charging.

*Bryson City v. Smoky Mountain Power Co.* (Docket 620).



### Prohibition against Rate Making by Commission Is Too Late after Decision

AN application by the city of New York to restrain the public service commission from fixing rates for hydrant service was denied where it appeared that the commission had already made its determination. The court held that prohibition lies in instances where the commission is presently acting, or about to act, in matters beyond its jurisdiction, but that the city had not made its application in time.

Although the city was aware that hy-

drant rates were within the scope of the investigation undertaken by the commission, it made no objection and sought no remedy, and not until the inquiry and the determination based upon the inquiry were complete did it commence the proceeding. The court pointed out that there was no longer any act or determination to prohibit. The commission had acted and its determination had been made. *City of New York v. Maltbie et al.*, 287 N. Y. Supp. 104.



### Delivery of Interstate Natural Gas to Distribution Company Held to Be Interstate Commerce

CONCLUSIONS of the supreme court of Missouri in a recent decision seem to be at variance with the decision of the Arkansas commission reported in PUBLIC UTILITIES FORTNIGHTLY, issue of June 18th, p. 845, concerning the interstate character of natural gas as it

is delivered from pipe lines and laterals within the state. The Missouri court reversed a commission decision holding that the Panhandle Eastern Pipe Line Company and its subsidiary, the Central States Gas Utilities Company, constituted one enterprise actually engaged in

## PUBLIC UTILITIES FORTNIGHTLY

the local distribution of gas in intrastate commerce in the state of Missouri.

The Panhandle Company owns and operates a main pipe-line system which commences in the state of Texas and runs through the states of Oklahoma, Kansas, Missouri, Illinois, and into Indiana, and transports through such pipe line and laterals therefrom gas acquired in the states of Texas and Kansas for the purpose of sale in large quantities to local distributing gas utilities at wholesale and industrial plants. Among the distributing utilities purchasing natural gas from the pipe-line company in Missouri is the subsidiary Central States. The court said in part:

The commodity—natural gas—acquired and transported as aforesaid in relator's pipe

lines moves in interstate commerce through this state, and said interstate movement continues until said gas enters the distribution system of the local distributing utility for distribution under low pressure for resale at retail to local consumers. So far as this record discloses, the work of relator to effect delivery as aforesaid is an incident to its interstate business as distinguished from the work upon the gas after delivery to effect its proper distribution for consumption by local consumers at retail (or to industrial plants for industrial purposes). Until such time as the natural gas here involved enters the distribution system of the local utility, the movement remains interstate; and the service thus rendered is not subject to the provisions of said Public Service Commission Law.

*State ex rel. Panhandle Eastern Pipe Line Co. v. Public Service Commission, 93 S. W. (2d) 675.*



### Commission Lacks Jurisdiction over Reorganization Plan under Section 77B

THE New York Transit Commission held that it had no jurisdiction over an application for approval of a reorganization plan of a street railway company under § 77B of the Federal Bankruptcy Act. The commission had executed and filed with the clerk of the Federal court a certificate certifying that the public interest was affected by the plan of reorganization. It had, moreover, adopted various orders granting applications, authorizations, and consents for various steps incident to the carrying out of the plan. These actions, it was said, covered all phases of the public interest contemplated by the certificate.

The commission pointed out that § 55-a of the Public Service Law gave the commission jurisdiction over reorganizations of street railroad corporations pursuant to §§ 96 and 97 of the Stock Corporation Law and such other laws as might be enacted from time to time. Reorganizations under these sections are those made following a judicial sale of

the corporate property and franchises, and as there had been no sale of the property and franchises of the railway the commission held that it had no jurisdiction. It was said further:

... as no other laws have been enacted by the legislature of this state, there is no state statute conferring jurisdiction over the plan submitted by the aforesaid petition to the commission.

It seems that the commission can derive its powers only from the legislature of this state and that no power can be conferred upon it by the Federal Congress. Nothing in § 77B indicates that Congress attempted to confer any power on state commissions. The language of § 55-a of the Public Service Law, giving supervision and control over reorganizations pursuant to "such other laws as may be enacted from time to time," should be construed as meaning such other laws as may be enacted from time to time by the legislature of this state. An attempt to adopt future Federal acts as part of the laws of this state would probably be an unconstitutional delegation of legislative power.

*Re New York Railways Corp. (Case No. 3264).*



## THE LATEST UTILITY RULINGS

### Commission Has Exclusive Jurisdiction over Question of Meter Tampering and Payment Therefor

THE superior court of Pennsylvania held that the commission had jurisdiction, and therefore the courts did not have jurisdiction, over controversies between an electric utility company and a customer resulting from a denial of service for tampering with a meter and the imposition of a charge to pay for the damage.

The customer sued the electric company to recover \$60 which he averred had unlawfully and unjustly been collected from him and which he had paid under protest in order to obtain service. The charge had been imposed to reimburse the utility for damage alleged to have been done by tampering with the meter, as compensation for costs of inspection, and for the consumption of unmetered current since the injury to the meter.

The court said that it seemed clear that all of these matters fell within the powers and authority expressly con-

ferred on the commission, stating further:

That body is the tribunal now invested with power and authority to consider and determine the justness and reasonableness of defendant's rules, regulations, and practices, and to apply, and enforce the application of its rules and regulations in such a manner as not to work injustice to its patrons, including the plaintiff, nor on the other hand, encourage tampering with defendant's meters or equipment by allowing the tamperer to get off without paying for current consumed by him, or by paying for it only the scheduled rates charged for the regular and usual registered supply of electricity. The commission is best fitted and equipped to pass on the reasonableness of the company's rules and regulations and the fairness of its practices in applying them, and, having determined these matters, to enforce them reasonably and uniformly. It is far better qualified to do so than is a succession of different juries in a series of different and unrelated actions at law.

*Hickey v. Philadelphia Electric Co.* 184 Atl. 553.



### Transportation of Own Goods Is Not Subject to Regulation

PERSONS operating trucks over the highways of New Mexico for the purpose of transporting their own property for sale are not, according to a ruling of the supreme court of that state, subject to regulation as contract motor carriers of property.

The commission argued that as the overhead charges are increased to the extent of cost of transportation, which must be added to the price of goods to meet the market, compensation is paid for transportation, and, accordingly, that operation is for "compensation" as specified in the statute.

The court, however, said that compensation "for hire" must necessarily be paid by one who hires, so in trans-

porting his own goods a carrier does not come within the statutory definition of "contract motor carrier for hire," as no one "hires" him. The court also said:

Assuming that appellants' construction of the act under consideration is correct, the facts stipulated do not warrant a holding that appellee is engaged in the transportation of property for "compensation." Appellees sell their own goods at the market price at the place of destination, and the cost of transportation is charged to overhead expense. No specific charges are made for transportation or specific amount added to the price of merchandise therefor. In such case they do not transport property for compensation.

*Rountree et al. v. State Corporation Commission et al.* 56 P. (2d) 1121.



## PUBLIC UTILITIES FORTNIGHTLY

### Unfiled Minimum Charge for Standby Industrial Gas Service Disallowed

THE Pennsylvania commission sustained a complaint by a glass manufacturing company against a gas company for refusal to make further delivery of natural gas at the filed rate of 40 cents net per thousand cubic feet applicable to industrial customers. The utility had demanded a minimum charge on the ground that the glass manufacturer obtained the greater portion of its gas requirements from its own gas fields and that only the excess amount needed was secured from the utility, such service being standby service or breakdown service.

The utility admitted that it had no tariff on file providing for partial use of its natural gas service by industrial gas consumers.

The utility company estimated a total cost of rendering service to the factory at \$73.25 per month exclusive of any capital cost for its wells, transmission, and distribution system, and any expense of operation in connection therewith. This evidence, it was said by the commission, was not conclusive to show the total cost of rendering service. The commission said further that even

if the expense of \$73.25 were proper, it would be unreasonable to require the customer to contract for a minimum monthly payment of \$1,800 as provided in a contract tendered to the company. The commission said:

The testimony shows that respondent has a sufficient source of gas available to it to furnish the requirements of complainant at any time, under existing conditions. In the past, respondent charged complainant a net rate of 40 cents per thousand cubic feet without any requirement for minimum use of gas or corresponding payment. It, therefore, is unreasonable under the circumstances to require complainant to pay a minimum monthly charge of \$1,800. Respondent should bill complainant at that rate for gas service rendered subsequent to the reopening of complainant's plant in April, 1935, and we so find. Furthermore, it would have been contrary to the Public Service Company Law for respondent to have imposed the requirement that complainant, or any other consumer, take or pay for a minimum daily quantity of gas of 150,000 cubic feet at a net rate of 40 cents per thousand cubic feet, unless such regulation was a part of the tariff on file with this commission, and had become respondent's legal rate.

*Quertinmont Glass Co. v. Greensboro Gas Co. (Complaint Docket No. 10738).*



### Other Important Rulings

THE supreme court of Florida sustained a decree enjoining a taxicab company from engaging in the business of picking up passengers and transporting them for hire at a fare of 10 cents per passenger along designated bus routes of a bus company holding an exclusive franchise, ruling that the city was authorized to regulate the use of its streets by privately owned bus and taxicab operators, that it was within its right in granting an exclusive franchise to operate busses, and that when granted such franchise might be protected by injunction or other appropriate relief. *Jarrell v. Orlando Transit Co. 167 So. 664.*

The New York Transit Commission held that it had no jurisdiction to authorize the trustee of a railroad company to operate fewer trains than were required by an ordinance accepted by the railroad company, where the only statutory powers of the commission were conferred by a section of the statute referring to inadequacy of service. The commission stated that the statute must be regarded upon well-known rules of construction as containing all the authority which the legislature intended to give to the commission with respect to that subject. *Re Bardo (Case No. 3300).*

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports*.

REPRINTED FROM

# Public Utilities Reports

COMPRISING THE DECISIONS, ORDERS, AND  
RECOMMENDATIONS OF COURTS AND COMMISSIONS



VOLUME 13 P.U.R.(N.S.)

NUMBER 4

## Points of Special Interest

SUBJECT	PAGE
Scope of review of Commission decision - -	337
Valuation of left-in disconnected telephones -	337
Reproduction cost in determining rate base -	337
Loss of service value to measure accrued depreciation - - - - -	337
Excess telephone plant - - - - -	337
Apportionment between telephone toll and exchange - - - - -	337
Payments to related companies - - - -	337
Commission powers over depreciation allowance	337
Uniformity of rates in separate communities -	400

**Q** These reports are published annually in five bound volumes, with an *Annual Digest*. The volumes are \$6.00 each; the *Annual Digest* \$5.00. A year's subscription to PUBLIC UTILITIES FORTNIGHTLY, when taken in combination with a subscription to the Reports, is \$10.00.

---

# Titles and Index

---

## TITLES

- Pacific Gas & E. Co., Kentfield v. .... (Cal.) 400  
Pacific Teleph. & Teleg. Co. v. Thomas ..... (Or. Cir. Ct.) 337



## INDEX

- Appeal and review, improper methods as grounds for reversal, 337; review of non-constitutional matters in state courts, 337; scope of review, 337.
- Apportionment, jointly used telephone property, 337; property value and depreciation, 337; telephone revenues and expenses, 337.
- Constitutional law, separate departments of government, 337.
- Depreciation, annual allowance, 337; apportionment matters, 337; ownership of reserve, 337; powers of state Commission, 337; telephone property, 337.
- Discrimination, between localities, 400; rates, 400.
- Expenses, payments to affiliate, 337; repairs, 337; salaries, 337.
- Injunction, irreparable injury, 337.
- Intercompany relations, prices for materials purchased from affiliate, 337; relations between affiliates, 337.
- Procedure, effect of Federal decisions, 337.
- Rates, unit for rate making, 400.
- Return, business conditions as a factor, 337; confiscation, 337; telephone company, 337; telephone toll and exchange business, 337.
- Valuation, accrued depreciation, 337; book cost element, 337; excess telephone plant, 337; going value, 337; historical cost element, 337; material cost in reproduction estimate, 337; overheads, 337; property used or useful, 337; reproduction cost, 337; working capital, 337.





# Pacific Telephone & Telegraph Company

v.

## Charles M. Thomas, Public Utilities Commissioner of Oregon

[No. 115-747.]

### *Constitutional law, § 8 — Separate departments — Functions.*

1. The state Constitution forbids the uniting of legislative and judicial powers in a single hand, although there is nothing in the Federal Constitution to prevent a state from doing so, p. 346.

### *Procedure, § 36 — Stare decisis — Federal decisions.*

2. Federal decisions as to the scope of judicial review of legislative action should have controlling influence in a state where, as in the Federal Constitution, the legislative, executive, and judicial powers are vested by separate articles in separate departments of government, with a prohibition against persons charged with official duties under one department exercising any functions of another, p. 346.

### *Appeal and review, § 48 — Scope of review — Commission decisions.*

3. The function of the court in reviewing a Commission rate order is not to substitute its judgment as to the wisdom of legislative action or to make rates, but rather to determine a purely judicial controversy, adjudicating only such issues of law or fact as may be required to test the validity of the Commission's action, p. 346.

### *Appeal and review, § 49 — Commission rate order — State court.*

4. A state court reviewing a Commission rate order must determine the question (purely of state cognizance) whether the Commissioner acted within his jurisdiction and according to the laws of the state and must also test the order by the standards of the Fourteenth Amendment of the Federal Constitution when constitutional grounds are urged, p. 347.

### *Appeal and review, § 34 — Commission order — Prima facie lawfulness.*

5. A Commission rate order is not conclusive on the court but is prima facie lawful and reasonable, p. 348.

### *Appeal and review, § 48 — Scope of review — Fact and law.*

6. The court, in reviewing a Commission rate order, must exercise its own independent judgment as to the law and the facts, subject, however, to the rules of evidence and in recognition of the duty of the court to support the findings of the Commissioner, if and when he makes any findings, unless overcome by clear and satisfactory evidence, p. 348.

### *Appeal and review, § 48 — Scope of review — Nonconstitutional matters.*

7. State courts, unlike Federal appellate courts, in reviewing Commission rate orders, must determine nonconstitutional matters of state law, p. 348.

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

### *Appeal and review, § 55 — Grounds for reversal — Improper methods.*

8. The court, in reviewing a Commission rate order, must test the procedure of the Commissioner by the due process clause of the Constitution; and although administrative orders will not be enjoined for mere error in method or reasoning, nevertheless if the entire process is pervaded by the employment of an improper method so that the result is controlled thereby, the Commission's action violates the due process clause from the procedural standpoint, p. 354.

### *Valuation, § 215 — Property used or useful — Vacant land.*

9. Tracts of land acquired by a telephone company but connected with telephone operations only by a present intent to use them if and when business expansion requires it, and for the use of which no time has been set, should remain outside of the rate base, at least until its development is imminent, p. 355.

### *Valuation, § 207 — Property used or useful — Left-in disconnected telephones.*

10. Telephones disconnected from the central telephone office and left on the customer's premises pending reconnection or removal (with the expectation and hope that a new tenant will take the service), together with the associated inside wires, block and drop wires, should be included in the rate base of a telephone company when actually used and useful as standby or reserve plant indispensable to a going concern, particularly where an extremely heavy station movement constitutes ample justification of the left-in practice, p. 356.

### *Valuation, § 39 — Rate base — Reproduction cost measure.*

11. Cost of reproduction, a guide but not a measure of value for rate making, is the primary factor, p. 359.

### *Intercompany relations, § 15 — Materials purchased from affiliate — Price increase — Burden of proof.*

12. The burden of proof to justify increased prices for materials purchased by a public utility company from an affiliated company is heavily upon the utility company, p. 360.

### *Valuation, § 80 — Reproduction cost — Material cost — Purchases from affiliate.*

13. Material costs in a reproduction cost estimate were calculated on the basis of the price charged by an affiliated company prior to an increase in prices, the reasonableness of which had not been proven, p. 360.

### *Valuation, § 80 — Ascertainment of reproduction cost — Evidence.*

14. Data from operations which most nearly approach reproduction conditions are the most reliable indication of reproduction cost, p. 361.

### *Valuation, § 80 — Reproduction cost — Labor cost — Excesses above operating experience.*

15. Labor costs materially in excess of those developed from data for work done under operating conditions should be eliminated in determining reproduction cost when the amount of such expense is purely a matter of opinion, it is not proven that such added expense is not counterbalanced by other factors which are active in operating experience and are not active in reproduction new, and routine estimates are used which fail to reflect the benefits of large construction, p. 361.

### *Valuation, § 76 — Reproduction cost — Present conditions.*

16. In determining reproduction cost of a telephone plant on the assumption

## PACIFIC TELEPHONE & TELEGRAPH CO. v. THOMAS

that the plan is not in existence but that all other conditions in the area are identical, there must be included among the conditions assumed to exist the fact of a parent telephone company with its vast system for the aid of subsidiaries and the existence of an affiliated manufacturing company furnishing telephone equipment, p. 361.

### *Valuation, § 164 — Overheads — Reproduction of telephone plant.*

17. An allowance of 42.93 per cent, stated as a percentage of labor, was held reasonable for overheads in estimating reproduction cost of a telephone plant on company work, and an allowance of 9.84 per cent on contractors' work, based on actual experience with contract work, p. 364.

### *Valuation, § 132 — Overheads — Omissions and contingencies.*

18. An allowance of 2 per cent for omissions and contingencies was held ample in estimating reproduction cost of telephone property, p. 365.

### *Valuation, § 140 — Overheads — Interest during construction — Rates — Period.*

19. Interest during construction of telephone plant was calculated at 6 per cent instead of 7 as claimed by the company and was figured for the construction period to include interest on each uncompleted portion of the property until that portion was ready for operation, interest not to terminate when the first unit was put into operation, p. 365.

### *Valuation, § 75 — Reproduction cost estimates — Actual expenditures.*

20. Reproduction value is not a matter of outlay, but proof of actual expenditures originally made, though not indispensable, is helpful, p. 366.

### *Valuation, § 96 — Accrued depreciation — Application of percentage to base.*

21. An approved percentage of existing depreciation must be applied to the approved value instead of being applied to a reproduction cost estimate which is disapproved, p. 366.

### *Valuation, § 83 — Accrued depreciation — Loss of service value.*

22. Actual depreciation (a deduction from value) should be calculated on the base of loss of service value, p. 367.

### *Valuation, § 104 — Accrued depreciation — Reserve as measure.*

23. The amount of depreciation reserve is not even reliable evidence of actual depreciation when the reserve is the result of excessive charges to depreciation expense, p. 367.

### *Valuation, § 101 — Accrued depreciation — Field inspection.*

24. An estimate of existing actual depreciation of telephone plants was approved when based upon the ascertainment of per cent of service condition as compared to condition new, not determined by vague estimates of an actuarial nature but by technical inspection and test, with consideration of nonphysical items such as inadequacy, requirements of public authorities, and obsolescence, p. 367.

### *Valuation, § 212 — Excess telephone plant — Relation to number of calls.*

25. The elimination of a part of the value of telephone property from the rate base on the ground that it is excess plant is invalid as a matter of law when the amount eliminated is based on the percentage decrease in telephone calls during a depression, since this process involves every fallacy that would be incident to an attempt to fix valuation of utility property by capitalizing earnings, p. 370.

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

### *Valuation, § 332 — Going value — Separate allowance.*

26. No additional sum should be included in the rate base for going value when constant and conscious consideration to going concern value has been given at every step of the process of valuation and, in determining reproduction cost, substantially all elements included in going value have been taken into consideration, including inception cost, engineering, making of estimates, counsel fees, franchises, organization expense, costs of incorporation, cost of securing capital, and cost of securing and building up business, p. 372.

### *Valuation, § 357 — Going value — Evidence — Uncontradicted estimate.*

27. An estimate of going concern value uncontradicted in the record need not be accepted in determining the rate base, since opinion evidence as to value, even if entitled to some weight, has no such conclusive force that there is error of law in refusing to follow it, p. 375.

### *Valuation, § 40 — Rate base — Reproduction cost.*

28. Reproduction cost new less depreciation is a guide but not a measure in determining fair value, p. 375.

### *Valuation, § 28 — Rate base — Book cost.*

29. Book cost is relevant and important in determining fair value, its weight depending on the trend of values and prices over the period considered, p. 376.

### *Valuation, § 32 — Rate base — Historical cost.*

30. Serious consideration must be given to the fact of actual historical cost of construction in determining the rate base, p. 376.

### *Apportionment, § 61 — Property value and depreciation — Telephone system.*

31. Value and loss of value of identical property must be allocated on the same percentage basis between intrastate toll and local exchange telephone property, since the undivided fractional part of a mass of jointly used property, the value of which is allocated to exchange, cannot be depreciated to any other or different degree than would be true of the other undivided fractional part of the same identical joint property allocated to toll, p. 376.

### *Apportionment, § 61 — Jointly used telephone property — Station-to-station method.*

32. The station-to-station method was used in allocating telephone property between intrastate toll and local exchange telephone business, p. 376.

### *Expenses, § 72 — Repairs — Reasonableness — Effect of accounting change.*

33. A deduction from the amount of expense shown by a telephone company's books to have been incurred for exchange repair (an item of current maintenance) is improper if based upon the ground that exchange repairs per station and per thousand calls were higher during the year under investigation, when it is explained that by reason of a change in accounting classifications by order of the Interstate Commerce Commission items of current maintenance formerly charged to other accounts were in that year charged to exchange repairs; in the absence of a showing of inefficiency or improvidence, a court will not substitute its judgment for the judgment of the managers of a business as to the measure of a prudent outlay, p. 378.

PACIFIC TELEPHONE & TELEGRAPH CO. v. THOMAS

*Depreciation, § 26 — Annual calculation — Reconstruction of reserve — Conformance with accrued depreciation.*

34. A calculation of annual depreciation expense by treating observed depreciation as the balance which properly should have been in the depreciation reserve and calculating the amount of current depreciation over a period of years to produce that balance is erroneous because it proceeds upon the false hypothesis that the balance in the depreciation reserve at any given time is the measure of the observed depreciation, p. 379.

*Depreciation, § 23 — Annual allowance — Relation to depreciation disbursements.*

35. An assumption that a company has no right to raise more money for depreciation than is actually disbursed in a particular year is fallacious, p. 379.

*Depreciation, § 26 — Annual allowance — Relation to observed depreciation — Credit to reserve — Current maintenance.*

36. A comparison of observed depreciation, credits to depreciation reserve, and charges for current maintenance was held to constitute ample evidence to support a Commissioner's finding that a telephone company had made excessive charges for depreciation expense, p. 380.

*Appeal and review, § 39 — Commission decision — Depreciation expense.*

37. A Commissioner's finding that excessive charges have been made for depreciation expense, when based on ample evidence, has prima facie validity, and before the court can disregard it clear and satisfactory evidence must be produced to show that it is erroneous, p. 380.

*Depreciation, § 40 — Ownership of reserve — Past excessive charges.*

38. The balance in the depreciation reserve belongs to the company and cannot be used to make up the deficiency when unreasonably low rates are prescribed, although the company may have made excessive charges for depreciation in the past, p. 383.

*Expenses, § 95 — Salaries — Reasonableness.*

39. A Commissioner exceeds his authority in attempting to eliminate as an operating expense salaries actually and in good faith incurred by the company when there is no showing that excessive salaries were paid, his action being based on a comparison of salaries with those of an earlier year to which there has been applied a percentage comparable to percentage increase in average wage rates and average number of telephone stations, p. 384.

*Intercorporate relations, § 14 — Relations between affiliates.*

40. A parent telephone company and an operating subsidiary may be regarded as departments of one large organization for the purpose of determining the validity of a license contract and the propriety of payments made thereunder; and the relationship existing between them makes it the duty of the court to scrutinize closely their dealings to prevent imposition upon the community served by the subsidiary company, p. 386.

*Expenses, § 87 — Payments to parent telephone company — License contract — Burden of proof.*

41. A subsidiary telephone company has a strong burden of proof to sustain the fairness of a contract under which payments are made to a parent corporation and must show at least that the sums it pays to the parent corporation are reasonable in view of the services rendered and the benefits



## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

obtained, and that like services and benefits are not to be had for less from other sources, p. 386.

### *Expenses, § 87 — Payments to parent telephone company — Reasonableness — Cost basis.*

42. A telephone company seeking to prove the reasonableness, as a charge to operating expenses, of payments to a parent company must establish the cost to the parent company of services covered by the contract by clear and satisfactory evidence, p. 386.

### *Expenses, § 87 — Payment to affiliated company — Parent telephone company — License contract.*

43. A telephone company should not be allowed as an operating expense a percentage of gross revenues paid to a parent telephone company under a license contract when the record fails to disclose with any degree of certainty the value and the cost to the parent company of the services paid for, although it is shown that the parent company has rendered to the telephone company extracontractual services such as engineering and financial advice as a gratuity, p. 386.

### *Apportionment, § 7 — Telephone revenues and expenses — Toll and exchange.*

44. An unconstitutional exercise of arbitrary power is shown when a Commissioner, through the medium of a separate valuation of exchange property and separate determination of exchange rates, juggles revenues and expenses as between the two branches of a telephone company's business in such a way as to decrease the expense and increase the revenue of exchange, and increase the expense and decrease the revenue of toll, and at the same time permits toll rates to remain as they are despite the fact that they are inadequate even to pay expenses of operation of the toll business, p. 389.

### *Apportionment, § 49 — Telephone exchange and toll — Profit to exchange department.*

45. Toll patrons of a telephone company should not be required to pay a profit on the use of property transferred from telephone exchange rate base to toll rate base (in a separation of property based on use) on the erroneous theory that the property does not belong to the toll department, p. 389.

### *Return, § 72 — Telephone toll and exchange business — Apportionment.*

46. The toll department of a telephone company is entitled to earn a fair return on the value of all property assigned to it in a separation of jointly used property between toll and exchange, p. 389.

### *Apportionment, § 49 — Telephones — Toll and exchange revenues.*

47. An equitable adjustment in fixing telephone exchange rates demands that the income from the exchange property assigned to toll should go with the expense of maintaining it, p. 389.

### *Apportionment, § 39 — Telephone expenses — Toll and exchange — Removals and changes.*

48. The allocation factor developed for the separation of the value of telephone stations between toll and exchange should be applied to the expense of removing and changing them, since the expense so incurred is intimately related to the use of the property; and station removals and changes should not be made in accordance with the commercial expenses, p. 394.



PACIFIC TELEPHONE & TELEGRAPH CO. v. THOMAS

*Return, § 35 — Factors affecting reasonableness — Business conditions.*

49. General business conditions must be given due weight in determining the reasonableness of return, since a utility is not entitled to escape its share of the common loss in time of depression nor to earn as large a profit as during a period of general prosperity, p. 397.

*Return, § 113 — Telephone company — Confiscation.*

50. A return of 6 per cent on the fair value of telephone property was held to be the rate of return necessary in order to avoid confiscation, p. 398.

*Depreciation, § 4 — Powers of state Commission — Effect of Federal regulation.*

51. A state Commission has power to determine proper depreciation rates for a telephone company notwithstanding a direction by Federal statute to the Interstate Commerce Commission to prescribe the percentages of depreciation to be charged by telephone companies, in the absence of an exercise of that power by the Federal Commission, p. 398.

*Depreciation, § 77 — Telephone company.*

52. A percentage rate of 3.995 was held reasonable for depreciation of a telephone company, p. 399.

*Appeal and review, § 39 — Commission decisions — Depreciation rates.*

53. The jurisdiction of the court to review a Commission order prescribing a depreciation rate for a telephone company is limited to ascertaining whether there is substantial evidence to support the ruling, because it is purely legislative in character and presents no issue of confiscation, p. 399.

*Injunction, § 7 — Commission order — Depreciation rate — Irreparable injury.*

54. Injunction should not be granted against the enforcement of a Commission order prescribing depreciation rates when there is no showing of irreparable injury that would justify the company in invoking the extraordinary remedy of injunction, p. 399.

*Depreciation, § 2 — Powers of state — Prescribing depreciation rates.*

55. The state has it within its power to prevent future abuses in connection with excessive charges for depreciation expense by fixing the rate at which depreciation expense may be charged, p. 399.

*Valuation, § 289 — Working capital — Definition.*

Definition of working assets, p. 365.

*Valuation, § 119 — Overheads — Definition.*

Definition of undistributed construction expenditures, p. 366.

*Valuation, § 330 — Going value — Definition.*

Definition of going concern value, p. 372.

*Apportionment, § 7 — Telephone company — Toll and exchange.*

Discussion of the board-to-board methods and the station-to-station methods of separating telephone exchange and toll revenues and expenses, p. 389.

*Return, § 50 — Confiscation — Factors involved.*

Discussion of the applicable standards for determining whether a rate of return is sufficient to avoid confiscation in view of Supreme Court decisions, p. 396.

[March 19, 1936.]

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

**I**NJUNCTION suit to restrain enforcement of Commission order reducing telephone rates and of order prescribing depreciation rates; injunction granted against rate order and injunction against order fixing depreciation rates denied. For Commission decision see 8 P.U.R.(N.S.) 61.

By the COURT: The plaintiff Pacific Telephone & Telegraph Company is a California corporation which conducts a telephone business in the states of Oregon, Washington, California, and Idaho. It furnishes to the public telephone exchange service, intrastate telephone interexchange (otherwise known as toll) service, and interstate telephone interexchange service both over its own system and over the system with which it connects to provide a national and international service.

On March 25, 1931, the then Commissioner of Public Utilities, Charles M. Thomas, initiated on his own motion the present proceeding by ordering an investigation of the rates, charges, tolls, rules, regulations, methods, practices, and service of the plaintiff for furnishing telephone service to its subscribers in the state of Oregon, for the purpose of determining whether any of such rates, etc., were unreasonable, unjustly discriminatory, or otherwise in violation of law.

After extended hearings, the Commissioner, on October 11, 1934, made an order (No. 2490 [8 P.U.R.(N.S.) 61]) reducing the rates for the company's exchange or local service within this state, and fixing a rate of annual charge for depreciation expense to be observed by the company in the future. The rates for interexchange service were not disturbed.

13 P.U.R.(N.S.)

The Commissioner found the fair value of the exchange property to be \$15,900,000, and of the toll property to be \$4,925,000, as of December 31, 1933, and stated that on the exchange rate base thus established the company's rate of return was  $7\frac{1}{4}$  per cent from existing rates, and that the reduced rates should yield a return of  $5\frac{1}{4}$  per cent to 6 per cent.

The effective date of the order was November 1, 1934. Before that date the company filed its complaint charging that the new rates would be confiscatory, challenging the authority of the Commissioner to fix an annual rate of depreciation expense, and praying for an injunction. An application for a preliminary injunction was heard and granted by this court October 31, 1934 (6 P.U.R.(N.S.) 462) on condition, which was complied with, that the company give bond to indemnify its subscribers and patrons against loss in the event that the new rates should ultimately be found valid. On January 7, 1935, additional evidence was heard by this court, and the case thereafter remanded to the Commissioner pursuant to the provisions of § 61-250 Oregon Code, 1930, as amended. January 28, 1935 (8 P.U.R.(N.S.) 111) the Commissioner issued an order reaffirming his previous action, and certified the record to this court. On January 6, 1936, the case was heard on the merits. The company claims

## PACIFIC TELEPHONE & TELEGRAPH CO. v. THOMAS

that, whereas the intrastate exchange rates in effect during the years 1931, 1932, 1933, and the first six months of 1934 were not compensatory, but were unjust and unreasonable, the effect of the rate reduction ordered by the Commissioner will be to reduce its present revenues by the sum of not less than \$365,000 a year, and to confiscate its property, in violation of the due process clause of the Fourteenth Amendment to the Constitution of the United States.

The complaint alleges that the Commissioner both understated the value of its properties used and useful for the convenience of the public in its local exchange business, and overstated its net revenue arising out of that business.

As to the former, it is the company's claim that the fair value of its entire property in the state of Oregon on December 31, 1933, was \$36,535,779, and of its intrastate telephone property was not less than \$30,508,210, whereas the Commissioner had found the fair value of the intrastate portion to be but \$20,825,000.

A major issue on the valuation question arises upon the Commissioner's alleged unlawful action in finding that the properties of the company included excess plant to the extent of \$5,221,358, and apparently eliminating that amount from the rate base. The company also contends that certain specific items of property aggregating in value \$747,512, were erroneously excluded by the Commissioner as not used and useful in the business devoted to the public. While the Commissioner made no findings of reproduction cost new, evidence was introduced on that subject by

both sides, which had the Commissioner's consideration, and the plaintiff alleges in its complaint that the Commissioner erroneously determined that the company's calculation of the cost of reproducing the properties was too high, and thereby erred as to one of the controlling elements in determining the fair value of plaintiff's property. The complaint further charges that in allocating plaintiff's property to its various uses, for the purpose of arriving at the fair value of the intrastate exchange portion, the Commissioner assigned too small a percentage of the entire property to intrastate exchange, and that on the other hand he reversed the process when finding the extent of observed depreciation, increasing the portion of such depreciation properly allocable to intrastate exchange and correspondingly reducing the depreciation in the remainder of the property.

The Commissioner determined in his order that the company's balance of net revenue for local exchange business for the year 1933 was \$1,166,719. The complaint alleges this to be erroneous in the amount of \$608,657, that its net revenue for that year was but \$558,061. The parties are in agreement as to the company's gross income, but, according to the complaint, the Commissioner erred in eliminating four items of operating expense for Oregon business (exchange repair, depreciation expense, general office salaries, and payment under a certain license contract with the American Telephone and Telegraph Company), aggregating \$505,891; in failing to deduct from exchange revenue the sum of \$151,430,

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

which the company asserts should be allocated to its interexchange business by reason of the use of exchange property for toll purposes; and finally, owing to alleged errors in mathematical calculations, in withdrawing from exchange expense and assigning to interexchange expense two items, one for current maintenance and one for taxes, amounting to approximately \$108,000.

The result, according to the complaint, is, that if the rates ordered by the Commissioner are put into effect, the rate of return which it will be possible for the company to earn on the present fair value of its intrastate exchange property will be even lower than 2.30 per cent, which, it is claimed, was the rate of return for exchange business in the year 1933; whereas, the company asserts that it is entitled to a rate of return of 7½ per cent on the fair value of its property.

The plaintiff further alleges in its complaint that it is sustaining a loss in the operation of its intrastate interexchange business, and complains because the order not only failed to provide for a fair return on what is claimed to be the unreasonably low valuation placed by the Commissioner on its intrastate exchange property, but even fails to compensate the plaintiff for expenses which the order transfers from exchange accounts to toll accounts.

The company takes the position in its complaint that it is beyond the power of the Commissioner to fix an annual rate of depreciation expense. It contends that that power is vested in the Interstate Commerce Commission alone, and that in any event the

rate fixed by the Commissioner—3.995 of the average annual depreciable fixed capital—is inadequate for its requirements.

The defendant in his answer denies all the allegations of error on the part of the Commissioner.

On December 31, 1933, the balance in the plaintiff's depreciation reserve was in excess of \$7,000,000. The charges to depreciation expense for that year amounted to \$1,456,138. The defendant contends that these charges have been excessive for many years past, that the amount of such excess for 1933 was even far greater than found by the Commissioner and more than sufficient, if added to net revenue, to prevent confiscation as the result of the rates in suit.

### *Scope of Judicial Review*

[1-3] At the threshold of inquiry we must determine the proper scope of judicial review. The order of the Commissioner fixing rates for the future was an exercise of legislative power. *Arizona Grocery Co. v. Atchison, T. & S. F. R. Co.* (1932) 284 U. S. 370, 76 L. ed. 348, 52 S. Ct. 183. It is to be tested in a judicial tribunal.

While there is nothing in the Federal Constitution to prevent a state from uniting legislative and judicial powers in a single hand (*Prentiss v. Atlantic Coast Line Co.* [1908] 211 U. S. 210, 53 L. ed. 150, 29 S. Ct. 67), it is nevertheless clearly forbidden by the Constitution of the state itself. As in the Federal Constitution so in Oregon we find the legislative, executive, and judicial powers vested by separate articles in separate departments of the government, with

the additional proviso that "no person charged with official duties under one of these departments shall exercise any of the functions of another except as . . . provided." (Constitution of Oregon, Art. 3, § 1.)

Obviously, then, the Federal decisions as to the scope of judicial review of legislative action should have controlling influence in this state. The rule which forbids the exercise of legislative or administrative power by a constitutional court has been uniformly maintained from the decision in *Hayburn's Case* (1792) 2 Dall. 409, 1 L. ed. 436; *Gordon v. United States* (1865) 2 Wall. 561, 17 L. ed. 921; *Keller v. Potomac Electric Power Co.* (1923) 261 U. S. 428, 67 L. ed. 731, 43 S. Ct. 445; and see *Dickinson, Administrative Justice and the Supremacy of Law*, note p. 167. The same rule has been applied in *Oregon. Hammond Lumber Co. v. Public Service Commission*, 96 Or. 595, 598, 602, P.U.R.1920E, 144, 189 Pac. 639, 9 A.L.R. 1223. The fixing of rates for a utility is a legislative act which cannot be delegated to a court. *Re Sanborn* (1893) 148 U. S. 222, 37 L. ed. 429, 13 S. Ct. 577; *Prentiss v. Atlantic Coast Line Co.* *supra*; *Arizona Grocery Co. v. Atchison, T. & S. F. R. Co.* *supra*; *Minnesota Rate Cases* (1913) 230 U. S. 352, 57 L. ed. 1511, 33 S. Ct. 729, 48 L.R.A. (N.S.) 1151, Ann. Cas. 1916A, 18; *Re Chicago, M. St. P. & P. R. Co.* (1931) 50 F. (2d) 430; *Southwestern Bell Teleph. Co. v. San Antonio*, 2 F. Supp. 611, P.U.R.1933D, 405; *Los Angeles Gas & E. Corp. v. California R. Commission*, 289 U. S. 287,

304, 77 L. ed. 1180, P.U.R.1933C, 229, 53 S. Ct. 637.

Our function, therefore, is not to substitute our judgment as to the wisdom of legislative action or to make rates, but rather to determine a purely judicial controversy, adjudicating only such issues of law or fact as may be required to test the validity of the Commissioner's action.

[4] Since the rate order is an exercise of power delegated by statute we must determine the question (purely of state cognizance) whether the Commissioner acted within his jurisdiction and according to the laws of Oregon.<sup>1</sup> Since the order has been challenged upon constitutional grounds we must also test it by the standards of the Fourteenth Amendment.

We shall first examine the provisions of statute and thereafter the mandate of the Constitution.

Oregon law imposes upon the Commissioner the duty to value all the property of the utility actually used and useful for the convenience of the public (Oregon Code, § 61-209), to represent the patrons of the utility and protect them from unjust exactions (Oregon Laws, 1931, Chap. 103, § 5). Unreasonable rates are prohibited and he is empowered to fix reasonable ones (Oregon Code, §§ 61-243, 61-251). Such orders when made are *prima facie* lawful and reasonable, subject, however, to judicial review by suit (Oregon Laws, 1933, Chap. 441). ". . . unless and until set aside . . . the findings and order of the Commissioner . . . shall be conclusive, both as to matters of

<sup>1</sup> See also post, p. 371.



OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

fact and matters of law." (Oregon Code, § 61-253, as amended by 1933 Session Laws, Chap. 441, § 35.)

[5] Our immediate inquiry relates to the weight which we should give to the Commissioner's order in the trial of this suit which is brought to set it aside. The statutory language clearly implies that the order is not conclusive on the court. Since the order is made conclusive in the absence of suit, the words "prima facie lawful and reasonable" must apply to the only other possible situation, the event of suit. To rule otherwise would be to delete the prima facie clause from the statute. A prima facie case is such as will "suffice, until contradicted and overcome by other evidence."

[6, 7] The statute (Oregon Code, § 61-254, as amended 1933 Laws, Chap. 441, p. 829) further provides that suits brought to review the Commissioner's order shall be tried and determined as a suit in equity, which is suggestive of the procedure whereby our supreme court, upon a record made below, tries the facts "anew without reference to such findings" (Oregon Code, § 6-202). It clearly repudiates the idea that the review should be limited to questions of law. It is also provided that the transcript of testimony taken by the Commissioner "shall be received in evidence (in the reviewing court) with the same effect as if said evidence had been given and said proceedings had upon the trial" (1931 Laws, Chap. 103, § 7). Finally, the statute imposes the burden upon the utility of proving by clear and satisfactory evidence that the order is unreasonable

or unlawful (Oregon Code, § 61-258).

Thus, so far as the express wording of the statute is concerned we find no limitation upon our power to weigh the evidence except that, as in all cases, we must weigh it under the rules of evidence concerning burden of proof and the like.

Though there is nothing in the bare statute which limits our power further than we have indicated, the defendant suggests that, as construed by the Oregon supreme court, the statute does prohibit us from "disturbing findings of regulatory bodies when supported by substantial evidence" (defendant's brief, p. 31). It is essential that we remember the exact nature of this case. The order promulgates a general rate schedule. It is based on a general valuation of all of the utility property in Oregon. It is challenged on the ground that the order will not permit the utility to earn a fair return on the fair value of the property. The plaintiff relies upon the due process clause of the Federal Constitution. Only three Oregon cases are cited and none are in point.

In Hammond Lumber Co. v. Public Service Commission, *supra*, the order in suit involved only specific rates on logs, as distinguished from a general rate order bringing up the entire schedule tested by an entire valuation. In that case the plaintiff was a shipper who complained of an order fixing rates because they were too high. The plaintiff could not raise a question of basic confiscation. Its only grounds were the alleged unreasonableness of the rate. The shipper sued. The Commissioner



supported by the utility, defended. The court refuses to review the evidence.

In the instant case, the utility challenges a rate as too low and confiscatory. In the Hammond Case the shipper challenges a rate as too high and unreasonable. The distinction is obvious.

In *Oregon-Washington R. & Nav. Co. v. Corey*, 120 Or. 517, P.U.R. 1927C, 286, 299, 252 Pac. 955, certain specific rates on agricultural products were fixed by the Commission, no general rate schedule being involved. The railroad challenged the rates, alleging: 1. Discrimination against interstate commerce; 2. Unreasonableness, and 3. Confiscation. As to the claims of discrimination and unreasonableness the court properly refused to pass upon the conflicting testimony since the order was supported by substantial evidence. Upon the claim of confiscation the court found no evidence in the record. It says:

"It is impossible to say to what extent, if at all, the earnings of the carriers have been decreased through the putting into effect of the new rates."

There is not a word in the opinion to indicate that any basic valuation was made by the Commission or to what extent, if made, such valuation would throw any light on the controversy concerning a few isolated rates in a broad schedule which was not before the court.

The last case cited is *Valley & S. R. Co. v. Thomas* (1935) 151 Or. 80, 48 P. (2d) 358, 362, 363. This was also a suit to vacate an order fixing specific rates on logs. The court

pointed out that the only rate in question was a joint one applying to the lines of two companies. No evidence was received as to the division of the joint rate between the carriers. One of the carriers was not appealing. Obviously, the other could not point to any evidence as to the effect of the order upon its revenues. The court further declared:

"In order to invoke the constitutional protection the facts relied on to restrain the enforcement of rates prescribed under the sanction of state law must be specifically set forth."

And again:

"The complaint in the case before us does not specifically allege facts showing or tending to show that the rates involved are confiscatory of plaintiff's property."

Though confiscation was not in issue, the court nevertheless considered the evidence in detail and announced one rule of law which is of importance here. Revenues and expenses were discussed but not the value of the property. The court clearly distinguished between specific rate cases and general rate cases. As to the former, a property valuation would be immaterial if proven.

"The carrier cannot complain of a violation of its constitutional rights if it is compelled to make a rate for some particular service which will not equal a proportionate share of the entire expense of the road." (p. 369.)

"With respect to particular rates it is recognized that there is a wide field of legislative discretion permitting variety and classification, and hence the mere details of what appears to be a reasonable scheme of rates or a tariff or schedule affording substan-

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

tial compensation are not subject to judicial review." (p. 370.)

Again the court quotes with approval:

" . . . The statute does not require that the net return from all the rates shall affect the reasonableness of a particular rate or a class of rates. In such an inquiry the Commission may have regard to the service done, its intrinsic cost or a comparison of it with other rates, and need not consider the total net return at all." (p. 370.)

No citation could better illustrate the fundamental distinction between general valuation cases and specific rate cases. In the one the constitutional issue is directly involved; in the other (in the absence of arbitrariness) it is not.

Neither by the Oregon statute nor by its judicial construction are we restrained from making an independent investigation of the facts in a case involving substantive confiscation. We may add that if the statute did so limit us it would be unconstitutional.

Though it is true as indicated in the Oregon cases that courts will not review findings of fact when made by administrative tribunals if supported by substantial evidence and if confiscation is not in issue, nevertheless the scope of judicial review in a state court is a broad one. In the first place, the scope of Federal review of state administrative action must be distinguished from that of state review. The Federal appellate courts will seldom question the decisions of state courts on nonconstitutional matters of state law, but the state courts must, of course, determine such ques-

tions. *Hawks v. Hamill* (1933) 288 U. S. 52, 77 L. ed. 610, 53 S. Ct. 240. Although administrative fact finding may often be deemed final, the decisions of a Commission applying erroneous rules of law will always be reviewed. The Federal courts follow a like practice in dealing with Federal Commissions.

"On the other hand, the courts will overrule administrative discretion whenever it reaches a result inconsistent with some general proposition of law applicable to the entire class of similar cases. We here uncover the real distinction which lies behind the attempts to distinguish between so-called 'questions of law' and 'questions of fact' that have everywhere so confused the language of the opinions. Where the only ground which a court can give for its difference from the administrative body is limited to mere difference of opinion as to some matter or matters peculiar to the case, or some difference in inference from those matters, then the court should not disturb the opinion or inference of the fact-finding body unless the latter is plainly beyond the bounds of reason; for the difference is one of discretion, or 'fact.' On the other hand, where the ground of difference between court and fact-finding body can be isolated and expressed as a general proposition applicable beyond the particular case to all similar cases, the court, if it holds the proposition one of sound law, must enforce it by overruling the administrative determination." *Dickinson, Administrative Justice and the Supremacy of Law*, p. 168.

This distinction will become important in the case at bar. It is asserted

by the Commissioner that "the company's contentions that it is 'entitled to the independent judgment of the court on both the law and the facts' are predicated upon a misconception of the authorities" (defendant's brief, p. 6). We fear the defendant has misconceived his own authorities.

Our discussion is now directed to the single question of the scope of review as guaranteed by the Federal Constitution in a case involving basic valuation, a general rate order and a claim of confiscation. The authorities are conclusive. In the leading case of *Ohio Valley Water Co. v. Ben Avon*, 253 U. S. 287, 289, 64 L. ed. 908, P.U.R.1920E, 814, 815, 40 S. Ct. 527, a basic rate valuation was involved. In construing its own statute the state court had held that the administrative decision, being supported by evidence, could not be judicially reviewed. The Supreme Court of the United States said:

"The order here involved prescribed a complete schedule of maximum future rates and was legislative in character. *Prentis v. Atlantic Coast Line Co.* (1908) 211 U. S. 210, 53 L. ed. 150, 29 S. Ct. 67; *Lake Erie & W. R. Co. v. State P. U. C. ex rel. Cameron*, 249 U. S. 422, 424, 63 L. ed. 684, P.U.R.1919D, 459, 39 S. Ct. 345. In all such cases, if the owner claims confiscation of his property will result, the state must provide a fair opportunity for submitting that issue to a judicial tribunal for determination upon its own independent judgment as to both law and facts; otherwise the order is void because in conflict with the due process clause, Fourteenth Amendment. *Missouri P. R. Co. v. Tucker* (1913) 230 U. S.

340, 347, 57 L. ed. 1507, 33 S. Ct. 961; *Wadley S. R. Co. v. Georgia*, 235 U. S. 651, 660, 59 L. ed. 405, P.U.R.1915A, 106, 35 S. Ct. 214; *Missouri v. Chicago, B. & Q. R. Co.* (1916) 241 U. S. 533, 538, 60 L. ed. 1148, 36 S. Ct. 715; *Oklahoma Operating Co. v. Love* (1920) 252 U. S. 331, 64 L. ed. 596, 40 S. Ct. 338."

The statute as construed was held unconstitutional. This case has been often cited and never overruled. It was approved in the following cases, all but one of which involved basic valuations for rate-making purposes: *Bluefield Water Works & Improv. Co. v. West Virginia Pub. Service Commission*, 262 U. S. 679, 67 L. ed. 1176, P.U.R.1923D, 11, 43 S. Ct. 675; *United R. & Electric Co. v. West*, 280 U. S. 234, 74 L. ed. 390, P.U.R.1930A, 225, 50 S. Ct. 123; *Kansas State Corp. Commission v. Wichita Gas Co.* (1934) 290 U. S. 561, 78 L. ed. 500, 1 P.U.R.(N.S.) 433, 54 S. Ct. 321; *Denver Union Stock Yard Co. v. United States*, 57 F. (2d) 735, P.U.R. 1932C, 225. The rule is stated as dictum in *Lehigh Valley R. Co. v. Public Utility Comrs.* (1928) 278 U. S. 24, 73 L. ed. 161, P.U.R.1929A, 209, 49 S. Ct. 69; *Crowell v. Benson* (1932) 285 U. S. 22, 76 L. ed. 598, 52 S. Ct. 285; *Duluth Street R. Co. v. Minnesota R. & Warehouse Commission* (1924) 4 F. (2d) 543, P.U.R.1925D, 226; *Georgia R. & Power Co. v. Georgia R. Commission*, 262 U. S. 625, 67 L. ed. 1144, P.U.R. 1923D, 1, 43 S. Ct. 680.

More persuasive, however, than the convincing language of these decisions is the uniform practice of the Federal

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

courts when the issue of confiscation is raised in this type of case. In many instances the matter is referred to a master who makes an independent, detailed, and exhaustive report. The courts themselves again exercise independent judgment upon the judicial findings of the master and the Supreme Court has often repeated the process. *Los Angeles Gas & E. Corp. v. California R. Commission, supra*; *Wabash Valley Electric Co. v. Young*, 287 U. S. 488, 77 L. ed. 447, P.U.R. 1933A, 433, 53 S. Ct. 234; *Minnesota Rate Cases, supra*; *Oklahoma Operating Co. v. Love, supra*; *Georgia R. & Power Co. v. Georgia R. Commission, supra*; *Pacific Teleph. & Teleg. Co. v. Whitcomb*, 12 F. (2d) 279, P.U.R. 1926D, 815. Perhaps the most extreme exercise of the independent judgment rule in confiscation cases is to be found when the court considers and weighs the credibility of specific witnesses. In the *Whitcomb Case, supra*, at p. 824 of P.U.R. 1926D, one Fleager was a witness for the company. The court said:

"The special master, with commendable painstaking and scrutiny, examined the conflicting evidence, and concluded that the testimony of witnesses Blanck and Fleager . . . was the more satisfactory, convincing, and dependable. The record convinces us that he was justified in taking this view of the matter."

The defendant has cited a multitude of cases concerning the scope of judicial review. We have examined them all, and with the exceptions hereafter noted not one is a basic valuation case and not one is in point. Time will not permit a review. Some are specific rate cases, some involve

only questions of reasonableness or discrimination, some involve orders requiring regulation of facilities and services, some involve extensions of lines, mains, and the like. Several are cases in which rates were raised at the request of the utility and the order was upheld over the protest of a competing utility. The fact that courts have refused to review the fact-finding of an administrative tribunal when supported by substantial evidence in cases of this type is of no consequence in determining the proper scope of review upon the issues of substantive confiscation.

The case of *Peik v. Chicago & N. W. R. Co.* (1877) 94 U. S. 164, 24 L. ed. 97 (not cited) tends to support defendant's contention, for it lays down the broad rule that relief must be sought in the legislature and not in the courts. It is overruled by many cases. *San Diego Land & Town Co. v. National City* (1899) 174 U. S. 739, 760, 43 L. ed. 1154, 19 S. Ct. 804, was a valuation case involving a claim of confiscation and contains language tending to support defendant's contention. However, the particular attack of the utility was directed at the procedure of the Commission. The sufficiency of notice and hearing was in issue. The court cannot have meant that it deemed itself powerless to exercise an independent judgment, for it did in fact exercise one. The court said: ". . . upon a careful scrutiny of the testimony our conclusion is that no case is made that will authorize a decree."

The last case seeming to support defendant's contention is *San Diego Land & Town Co. v. Jasper* (1903) 189 U. S. 439, 441, 47 L. ed. 892,

# PACIFIC TELEPHONE & TELEGRAPH CO. v. THOMAS

23 S. Ct. 571. Once more a basic valuation was in issue. The court, by Justice Holmes, said:

"In a case like this we do not feel bound to reexamine and weigh all the evidence, *although we have done so*, or to proceed according to our independent opinion as to what were proper rates. It is enough if we cannot say that it was impossible for a fair-minded board to come to the result which was reached."

The most that may be said for this case is that although the Supreme Court of the United States is not required to exercise an independent judgment, yet it may do so and did do so. Both of the San Diego Cases, *supra*, preceded the Ben Avon Case, *supra*, by many years. In our opinion the independent judgment rule has now become definitely established.

Although it is now beyond question that the courts must exercise an independent judgment upon law and facts when the issue of substantive confiscation is raised, there still remains some question as to the exact meaning of that rule. Legislative action is always supported by a strong presumption of constitutionality, and this presumption has always been extended to decisions of administrative bodies exercising legislative powers. The persistent insistence upon this rule by the Supreme Court in some of the very cases in which the independent judgment rule is also applied makes it clear that our independent judgment of the facts must be in subordination to usual rules concerning presumption and burden of proof.

The exact question which is raised by our Oregon statute was briefly discussed by the Supreme Court in one

case, *Keller v. Potomac Electric Power Co.* (1923) 261 U. S. 428, 445, 67 L. ed. 731, 43 S. Ct. 445. The court said:

"Some question has been made as to the validity of . . . Par. 69, which puts the burden upon the party adverse to the Commission to show, by clear and satisfactory evidence, the inadequacy, unreasonableness, or unlawfulness of the order complained of. It is suggested that this deprives the public utility of its constitutional right to have the independent judgment of a court on the question of the confiscatory character of an order, and so brings the whole law within the inhibition of the case of *Ohio Valley Water Co. v. Ben Avon*, 253 U. S. 287, 64 L. ed. 908, P.U.R.1920E, 814, 40 S. Ct. 527. . . . It will be time enough to consider the validity of those sections when it is sought to apply them to bar or limit an independent judicial proceeding raising the question whether a rate or other requirement of the Commission is confiscatory."

The exact question is therefore left undecided. However, the rule requiring clear and satisfactory evidence to overcome the Commissioner's findings differs so little in practical effect from the well-recognized rule which strongly presumes the validity of such an order, that we have no doubt concerning the validity of the provision of the Oregon statute.

We are therefore to exercise our own independent judgment as to the law and the facts, subject, however, to the rules of evidence and in recognition of our duty to support the findings of the Commissioner, if and when he makes any findings, unless



# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

overcome by clear and satisfactory evidence.

[8] But one question remains for consideration. We have discussed the power and duty of the court to inquire into the facts relative to substantive confiscation. It is no less our duty to test the procedure of the Commissioner by the due process clause of the Constitution. The fine line between substantive and procedural due process has not as yet been drawn by the Supreme Court. Certain decisions indicate that neither errors of law nor mistakes of fact will induce the Federal courts, sitting only on the constitutional question, to enjoin a rate order unless upon the whole case the enforcement of the order would result in substantive confiscation. *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 290, 78 L. ed. 1267, 3 P.U.R.(N.S.) 279, 54 S. Ct. 647; *Los Angeles Gas & E. Corp. v. California R. Commission*, 289 U. S. 287, 77 L. ed. 1180, P.U.R.1933C, 229, 53 S. Ct. 637; *Tagg Bros. & Moorhead v. United States* (1929) 280 U. S. 420, 74 L. ed. 524, 50 S. Ct. 220; *United Fuel Gas Co. v. Kentucky R. Commission*, 278 U. S. 300, 73 L. ed. 390, P.U.R.1929A, 433, 49 S. Ct. 150; *West Ohio Gas Co. v. Ohio Pub. Utilities Commission* (1935) 294 U. S. 63, 79 L. ed. 761, 6 P.U.R.(N.S.) 449, 55 S. Ct. 316.

On the other hand, the propriety of a method used is always open to review and criticism when the validity of the result is the subject of inquiry. And it appears that, though administrative orders will not be enjoined for mere error in method or reasoning,

nevertheless if the entire process is pervaded by the employment of an improper method so that the result is controlled thereby, then the Supreme Court will condemn the commission's action as a violation of the due process clause from the procedural standpoint without inquiring into the question of substantive confiscation.<sup>2</sup>

This conclusion may be reached in case of a wrongful refusal to consider and employ an essential method (*St. Louis & O'Fallon R. Co. v. United States*, 279 U. S. 461, 73 L. ed. 798, P.U.R.1929C, 161, 49 S. Ct. 384), and may also be reached when an improper and controlling method of valuation has been employed, as clearly appears in the case of *West v. Chesapeake & P. Teleph. Co.* (1935) 295 U. S. 662, 79 L. ed. 1640, 8 P.U.R.(N.S.) 433, 55 S. Ct. 894. If the error in method so pervades the result as to deprive the utility of procedural due process of law, then we would be entitled to enjoin the order without proceeding further.

Upon these views concerning the proper scope of judicial review, we proceed to an examination of the facts in the instant case.

## Property Used and Useful

### (1) Land:

The issue in this case may be broadly stated thus: Will the rates prescribed by the Commissioner produce a fair return upon the fair value of the property used and useful for the convenience of the public? *Smyth v. Ames* (1898) 169 U. S. 466, 546, 42 L. ed. 819, 18 S. Ct. 418; *West v. Chesapeake & P. Teleph. Co. supra*.

<sup>2</sup> See also post, p. 372.



Before the validity of an order for rate-making purposes can be determined, we must ascertain what property is "used and useful" within the meaning of the rule.

[9] The first issue of this character relates to six parcels of land of the aggregate value of \$55,106. The company included and the Commissioner excluded them from valuation for rate purposes. (Order, pp. 7 and 8 [8 P.U.R.(N.S.) at p. 69]). One of these tracts was purchased in 1921, the rest in 1929. None has ever been used. All but one are still vacant. Business was increasing at the time of these purchases, and the company then intended in good faith to utilize these properties for operating purposes in the near future. (Tr. 545-54.) Owing to the depression, however, such plans were abandoned long before the date as of which the rate base is to be determined. The tracts remain connected with telephone operations only by a present intent to use them if and when business expansion requires it. Upon one of the tracts there is a dwelling house which has been rented, and it does not appear that the rentals have been credited to utility revenue. Although the difference may be largely one of degree, we think that such lands which have never yet been used, are to be distinguished from operating facilities which have actually been used but which have fallen into temporary disuse by reason of business recession. As stated in a valuable text: "No hard and fast rule has been developed, either by regulatory bodies or by courts, as to the . . . extent to which such property forms a part of the valuation. . . . Therefore with

respect to any given case, a Commission has the right to use judgment as to whether a given piece of property was necessary for the utility." Bauer & Gold Public Utility Valuation, 1934, 174, 175. We agree with much that is said in *Denver Union Stock Yard Co. v. United States*, 57 F. (2d) 735, 746, P.U.R.1932C, 225, 239, 240, but in that case the court found as of the time of valuation that "The evidence is likewise undisputed that the petitioner has about, if not quite, reached the limit of its present facilities. During the times of the peak load, the facilities are *not now* adequate." That court also conceded that: ". . . if the directors acquire more property that can reasonably be said to be necessary for the purposes of expansion for any reasonable period in the future, the secretary has power to disallow it." We do not assert any right to interfere with the general power of management incident to ownership. We merely find that property held by the company which is not inherently operating property and which is not used, and for the use of which no time has been set, should remain outside of the rate base at least until its development is imminent. See *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission*, *supra*; *United Fuel Gas Co. v. Public Service Commission* (1926) 14 F. (2d) 209, 221, P.U.R.1927A, 707; *Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 398, 406-408, 78 L. ed. 1327, 4 P.U.R.(N.S.) 152, 54 S. Ct. 763; *San Diego Land & Town Co. v. Jasper*, *supra*; *Chesapeake & P. Teleph. Co. v. Virginia*, 147 Va. 43, 58, P.U.R.1927B, 484, 136 S. E. 575.

OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

(2) *Left-in disconnected telephones.*

[10] The next question relates to left-in disconnected telephones and associated therewith, certain disconnected inside wires, block and drop wires, and teletypewriters. A left-in disconnected telephone is a telephone disconnected from the central office and left on the customer's premises pending reconnection or removal, with the expectation and hope that a new tenant will take the service. (Tr. p. 532, Order p. 13 [8 P.U.R.(N.S.) at p. 73].) In their reproduction cost studies as of December 31, 1932, the Commissioner and his staff excluded 15,267 left-in disconnects, which on that date constituted the entire number in the system. (Defendant's brief, p. 176, Exhibit 17.) He now asserts (defendant's brief, p. 174) that "these telephones are not actually used or useful." Obviously, then, he would exclude them from fair value as well as from reproduction cost.

The Commissioner's order, after a brief discussion and an assurance that the matter will be further discussed later, fails to make any specific finding as to whether they should be included or excluded in reproduction cost or fair value, but we are convinced that they were excluded from both.

We shall consider the question as to left-in disconnects, directly associated wires, and similar disconnected wires as a single problem. The amount which Lester excluded from the Angove estimate is \$606,285. The facts are as follows:

In January, 1929, there were 4,329 left-ins, equaling 3.19 per cent of the total active stations. In May, 1930, 13 P.U.R.(N.S.)

at the all-time peak of business, there were 7,526 left-ins, equaling 5.27 per cent of total active stations. (Exhibit 17.) Obviously left-ins to this number and per cent were accumulated during a period of increasing business, and for all that appears in the evidence, represented normal conditions. By October, 1933, under depression conditions, the left-ins had increased to 14,883, or 13.45 per cent of the then active stations, but the total number of active stations on which these percentages were figured, had decreased from 135,574 in January, 1929, to 110,668 in October, 1933. (Exhibit 17.) While the left-ins were increasing by 10,554, the active stations were decreasing by 24,906. Defendant's intimation (brief, p. 176) that in December, 1933, there were 22,963 left-in disconnects in the system, is unsupported by any evidence. His statement (brief, p. 176) to the effect that, after the exclusion of 15,267 left-ins, the company in December, 1933, still had 7,696 left-ins is erroneous. In fact there were fewer left-ins in December, 1933, than in December, 1932, and the trend was distinctly downward. (Exhibit 17.) By carrying over the December, 1932, elimination to December, 1933, the Commissioner has in effect eliminated the value of more left-ins than there were in the system. The fact that in December, 1933, there were fewer left-ins than in December, 1932, is further verified by analysis of net retirements between December, 1932, and December, 1933. It appears that the bulk of the net retirements, to the amount of \$233,802.98, was in accounts related to left-in disconnects. There is a shadow of logic in the

defendant's position when the left-ins are considered only from the standpoint of reproduction cost new. It is true, as asserted by the defendant, that "in reproducing property new as of December 31, 1933, for business and economical reasons it would not be built with 22,963 left-in disconnects." This is technically correct but in a reproduction cost study one does not construct a plant first and then determine if it is used and useful. He first determines what property of the company is used and useful, and thereafter reproduces that property. As stated in *McCardle v. Indianapolis Water Co.* (1926) 272 U. S. 400, 71 L. ed. 316, P.U.R.1927A, 15, 30, 47 S. Ct. 144, relative to reproduction cost: "There is to be ascertained the value of the plant used to give the service and not the estimated cost of a different plant." If the left-ins and the associated wires are in truth used and useful, a reproduction cost study should include them. We find them to be used and useful. Unlike the parcels of land discussed, *supra*, the left-ins are *per se* operating property. Unlike the land, they have been actually used. They do not represent excess acquisition or construction. The undisputed evidence shows that the company makes a specific study of each disconnect, appraises the probability of an early reconnection, and leaves the station in or removes it, according to the circumstances of the specific case. (Tr. p. 1040.) True, the company cannot know with certainty that any specific left-in will ever be reconnected, but it knows certainly that each specific left-in may be connected tomorrow, and it knows with reasonable certainty that a per-

centage of the total number of left-ins will be reconnected within a reasonable time. In 1932, 35 per cent of the telephones connected in Portland were reconnected left-ins. (Tr. p. 1513.) In that same year approximately 14,000 orders for service throughout the system were cared for by reconnecting left-ins, and approximately 13,000 were so cared for in 1933. (Tr. p. 1041.) The left-in disconnects and associated wires bear a strong resemblance in principle to the case of standby or reserve plant not actually in use at the moment of theoretical reproduction, but indispensable to a going concern and likely to be used at any time. The inclusion of such standby facilities in reproduction cost is recognized as necessary and proper. *Bauer & Gold, supra*, pp. 175-177.

The Commissioner's engineer, Lester, indicated that he had eliminated all disconnects from his reproduction study because there would be no need for them in view of the fact that business was decreasing. (Tr. p. 459.) This position also seems untenable. If we were to assume no change in the identity of the individual customers and that none of them moved from place to place (the only change being that some of them discontinued service), there would be little reason for left-in disconnects. The reconnection would then depend upon the securing of a new customer and upon the chance that he would occupy the disconnected premises. But since the identity of customers changes regardless of increase or decrease of the total, and since the identical customers are in motion from place to place, requiring disconnection here and con-

# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

nection there, regardless of the fluctuation in total number, it is clear that the probability of reconnection is greatly increased, and the disconnect practice is justified, even with a decreasing business. Between May 31, 1930, and December 31, 1932, the inward movement resulting from orders to connect or remove stations was 108,688, and the outward movement resulting from orders to disconnect or remove was 133,098. (Tr. p. 2062.) The company connected or moved 4.45 stations for every station lost, and disconnected or moved 5.45 stations for each station lost. The evidence (Tr. p. 1042) discloses "an extremely heavy station movement." This constitutes, we think, ample justification of the left-in practice. The unusual increase in the number of left-ins during 1932 and 1933 was the result of the depression. The evidence satisfies us that the tide is already turning for this company. There were approximately 3,000 fewer left-ins in October, 1933, than in the peak month of September, 1932. (Exhibit 17.) There was also a net gain of 1,275 active stations between August, 1933, and December, 1933 (the last month shown in the evidence). (Exhibit 73.) We take judicial notice of a marked improvement in business in Oregon, which must have increased the number of telephone customers between December, 1933, and November, 1934, and which promises further increases after that date. Only one witness, Lester, excluded the disconnects from reproduction cost new, and he first recognized the propriety of including left-ins to the normal extent of 3.41 per cent of the total of 136,532

13 P.U.R.(N.S.)

average stations in 1929. On the same reasoning he might equally well have included 8,826 left-ins, or 6.21 per cent of 142,124 stations, on the basis of normal experience in 1930, a period which preceded any appreciable falling off of business. On the contrary, with no additional data before him, he rejected his former conclusion and eliminated all (or more than all) disconnects in the system. Counsel for defendant seems to appreciate the weakness of the defendant's position, for he recognizes that "it is more economical to leave the stations in place when it is possible the service may be later connected than remove them and install new units when service is reestablished." And he also concedes that in reproduction cost new "sound methods dictate that only a usual number of left-in disconnects at the end of 1933 should be allowed." (Defendant's brief, p. 176.) This was said while counsel was under the misapprehension that 7,696 disconnects were still included in the Commissioner's value, an error of 7,696. It clearly and satisfactorily appears that the exclusion of all left-in disconnects was unreasonable and unlawful.

## Teletypewriters

The order of the Commissioner (p. 13 [8 P.U.R.(N.S.) at p. 73]) discloses a misapprehension concerning teletypewriters. The company had already classified these instruments as nontelephone service and their value does not appear in the company's final estimates of value of utility property. Lester in effect made a double elimination of this item which must be corrected.

The total amount by which Lester reduced the Angove total on account of disconnects, associated wires, and teletypewriter stations was \$692,406, which includes \$86,121 for teletypewriters. (Defendant's brief, p. 34.) This amount must be adjusted on account of our elimination of the Western Electric price increase (hereafter discussed). It follows that the net amount in controversy on this issue is \$653,037. We have therefore increased the Lester estimate of reproduction cost by that amount.

### *Reproduction Cost New*

[11] Among the elements named as relevant on the issue of fair value, the classic case of *Smyth v. Ames*, *supra*, includes "the present as compared with the original cost of construction . . . to be given such weight as may be just and right in each case." To disregard reproduction cost new in a valuation proceeding would invalidate an administrative order based thereon. *Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commission*, 262 U. S. 276, 67 L. ed. 981, P.U.R.1923C, 193, 43 S. Ct. 544, 31 A.L.R. 807; *St. Louis & O'Fallon R. Co. v. United States*, *supra*. Although we are to remember that the cost of reproduction is a "guide but not a measure" (*Los Angeles Gas & E. Corp. v. California R. Commission*, *supra*; *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission*, *supra*), the fact remains that "the primary factor appears to be the cost of the properties if they were to be reproduced at the time of valuation." *Bauer & Gold*, *supra*, p. 155.

Obviously, then, we are charged with the duty which was also imposed upon the Commissioner, to consider reproduction cost new, and before we can fairly consider it, we must determine what it is. The Commissioner asserts that he considered it, but made no finding as to its amount.

The date as of which value is to be determined is November 1, 1934. The evidence of reproduction cost new was amassed as of December 31, 1932, was trended to December 31, 1933, and on the base of that evidence we are to establish reproduction cost at the time of valuation, and in fixing fair value, we must give that estimate "such weight as may be just and right" in this particular case.

### *Reproduction Cost New as of December 31, 1932*

Witness Angove for the company made a comprehensive study of reproduction cost new based upon an inventory which is not in dispute. He arrived at the estimated cost of \$38,279,800. Witnesses Newell for the company and Hardinger for the Commissioner arrived at \$36,664,570 and \$36,219,491, respectively. Witness Lester, the Commissioner's engineer, fixed reproduction cost new at \$32,710,045. The above estimates relate to all property in Oregon deemed by the respective witnesses to be used and useful. Lester did not himself make a complete reproduction cost study, nor was it practicable for him to do so. His work may be considered as a comprehensive survey and criticism of the Angove study. For convenience we shall take the Lester estimates as the starting point for our



# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

discussion of reproduction cost new, which will classify costs under the following heads: Material, Supply Expense, Labor, Overhead, Incidentals, Omissions and Contingencies, and Other Expense. As already observed, Lester eliminated six parcels of land. We have approved the elimination.

## Material Costs

Lester also excluded left-in disconnects, associated wires, etc., from the property to be reproduced and made a duplicate exclusion of teletypewriters. We have disapproved of these exclusions and of this duplication. As a result, the Lester estimate of direct cost of materials must be increased by adding thereto \$374,421. (Note: The ruling on left-in disconnects, etc., also results in associated increases in the other categories—labor, overhead, and the like. The total increase on account of the inclusion of left-ins and wires and the correction for teletypewriters in all accounts is \$653,037.) The only other correction in the Lester estimate for material relates to prices paid the Western Electric Company.

[12, 13] It appears from the evidence that the Western Electric Company in 1930 increased its price on materials to the Pacific Company by 10.2 per cent over previous prevailing prices. Since this increase was made in a transaction between the Pacific and an affiliated company (both the Western Electric Company and the plaintiff being completely controlled by the American Telephone and Telegraph Company), the burden of justifying the increase was heavily upon the company. This burden it

has failed to sustain. *Illinois Bell Teleph. Co. v. Gilbert*, 3 F. Supp. 595, 603, P.U.R.1933E, 301. We have therefore reduced by \$789,411 the Lester figure for material cost. By so doing, we have calculated material costs on the basis of the price charged by the Western Electric Company prior to the 10.2 per cent increase of 1930. We have made this reduction only as to the materials purchased from the Western Electric Company. (Note: As a result of the \$789,411 reduction in direct material cost, associated reductions are automatically made for supply expense and omissions and contingencies. The total effect of eliminating the Western Electric price increase is to reduce the Lester estimate of reproduction cost new for all accounts to the extent of \$816,476.)

Our conclusion as to material costs is as follows:

Lester estimate .....	\$15,302,341
Increase on account of left-in disconnects, etc. ....	374,421
	<hr/>
	\$15,676,762
From which deduct excessive Western Electric charge .....	789,411
	<hr/>
Correct reproduction cost for materials .....	\$14,887,351

Our conclusion upon this important item differs from the Angove estimate only by reason of the Western Electric price correction. Angove and Lester were in accord as to material costs except as to the item for disconnects, wires, etc.

## Supply Expense

In this category there is no substantial disagreement. Angove allowed \$423,522, Lester \$408,750.



# PACIFIC TELEPHONE & TELEGRAPH CO. v. THOMAS

Our conclusion is as follows:

Lester estimate .....	\$408,750
Incidental addition account left-in disconnects, etc. ....	14,772
	<hr/>
	\$423,522
From which deduct on account of reduction in Western Electric prices .....	12,711
	<hr/>
Corrected amount of supply expense	\$410,811

## Labor

[14-16] We next approach the substantial controversy concerning labor. In estimating reproduction costs for labor and overhead, the company witness Angove, and in fact all of the witnesses, were compelled to use data from work done under operating conditions. In general, Angove developed averages based on experience over a period of three years, 1928 to 1930, and in some instances over a period of four years, 1929 to 1932. He concluded that work done under a reproduction-new program would involve labor costs materially in excess of those developed from data for work done under operating conditions. Broadly speaking, the position of the Commissioner and of his engineer was to the effect that reproduction labor costs would not exceed the average costs of actual performance during the 3-year period, and therefore that Angove's excesses should be eliminated. They also contend that the construction program of 1929 is the nearest approach to a fair basis for estimating reproduction labor costs, and that in view of the large construction program in 1929, the wage rates of that year should be substituted for the weighted average of the 1928 to 1930 wage rates.

It appears that under the reproduction-new program a volume of work

would be performed which would involve annual labor costs of \$1,500,000. Estimates of reproduction cost must be derived from some data. Since the reproduction new is purely hypothetical, "necessarily to obtain any volume of data, the parties had to use data from work done under operating conditions." (Plaintiff's brief, p. 53.) It is plain that this method, although necessary, is also unsatisfactory. We concur with the plaintiff when it asserts (brief, p. 52) that "if sufficient data were available to obtain fair averages of costs of large projects under conditions comparable to reproduction, that data should be used in preference to data derived from smaller current work under operating conditions." We must conclude that data from operations which most nearly approach reproduction conditions are also the most reliable indication of reproduction cost. We are constantly reminded by the company of the added expense involved in the training of inexperienced men and in the organization of a vast reproduction program. The amount of such expense over and above operating experience is purely a matter of opinion. We recognize the force of plaintiff's contention, but we think the plaintiff has wholly failed to prove that such added expense is not counterbalanced by other factors which are active in operating experience, and are not active in reproduction new. Not only does the company derive its data in large measure from a multitude of small routine estimates on which expense must necessarily have been greater than would be true in the case of large construction, but the data is also de-

# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

rived from years when the company was not geared to a large construction program. In both respects the company diverges *pro tanto* from reproduction conditions. Lester also, with few exceptions, has used routine estimates which failed to reflect the benefits of large construction. Notwithstanding the "green men" argument of the company, we think that the excesses above operating experience should be eliminated.

Though there may be a tendency toward increased cost by reason of the necessity for training men on a reconstruction program, the force of that tendency has been greatly exaggerated. We are told that a reproduction cost study should be made on the basic assumption that the telephone plant is not in existence, but that all other conditions in the Oregon area are identical. Among those conditions assumed to exist, there must be included the fact of the American Telephone and Telegraph Company as a parent company, with its vast system for the aid of its subsidiaries by legal advice, supervision, financing, technical guidance, and the like. Exhibit 122, consisting of twelve large volumes, is an eloquent testimonial as to the substantial aid that is received and might be expected from the parent company in the event of reproduction new. Such aid would be of incalculable value and would simplify and coördinate the reproduction job and would aid in the training of men for it. (Ex. 122-A. pp. 1-9 et seq., Tr. p. 1570 et seq., especially see Tr. p. 1590.) We must also assume, as one of the circumstances surrounding reproduction cost new, the existence of the Western Electric Com-

pany as an affiliate of plaintiff company. The record in this case gives persuasive examples of the incredible speed with which that company comes to the rescue of the Pacific Company on reconstruction problems. (Tr. p. 705.) It is fair to assume that within the parent and affiliated corporations there is a reservoir of available trained men as well as of materials, technical knowledge, and engineering experience. The elimination of the estimated excess costs over operating experience for the years covered by the company's studies is fully justified when we consider the economies incident to large construction which are not reflected in the data used by either party to this controversy. Labor costs of the plaintiff company for the years 1928 to 1932 were as follows:

1928	\$377,380
1929	761,906
1930	412,112
1931	214,442
1932	142,826

The gross additions to final plant account for the same years were as follows:

1928	\$3,038,091.97
1929	5,908,559.76
1930	4,080,146.17
1931	2,098,736.85
1932	1,711,283.09

(Order p. 6, plaintiff's reply brief, p. 252, Exhibit 26.) Thus it appears clearly that 1929 is the one year in the period (or in the company's experience) (Order p. 6), which substantially approaches reproduction conditions. In 1929, labor cost was double that of the preceding year. Inexperienced men must have been trained in the process of construction, and any expense in the training must have been reflected in the data for that

year. It is not a perfect analogy to reproduction conditions. There is none. But it was not a depression year in telephone business. The crash had not affected the company. Prices had not fallen, volume of work was at the peak, and since the then prevailing conditions resulted in lower wage rates than the company had developed over the 3-year period, we think the principle of the second Lester reduction was properly applied and that the present-day costs based on 1928 to 1930, or 1929 to 1932, performance should be decreased by the percentage that 1929 wage rates of company employees were below the weighted average of 1928 to 1930 wage rates. It may be beyond mathematical demonstration from the record that "wage rates and labor costs are proportionate," but we are convinced that, in the favorable situation of this company, and in view of its experience, they do vary together, and that 1929 wage rate experience under large construction persuasively indicates that costs of reconstruction on a large scale would be less than the costs derived from a multitude of scattered piecemeal jobs over a 3-year period.

To apply these observations: in six accounts, as to which he made reductions in his first study (and partly in a seventh), Lester eliminated the excess above the costs developed from operating experience in the years in question. We approve the elimination when properly carried out. In three other accounts, Lester made a large reduction. Angove had employed data from routine estimates as well as specific estimates. In the course of operations the routine estimate is made for comparatively small

jobs, the specific estimate for jobs of some magnitude. Lester developed his estimates only from the data derived from the large specific estimates. Outside of these three accounts he secured his data from both routine and specific estimates. The three accounts in question are (1) aerial wire, (2) toll poll lines, and (3) toll aerial wire. As to toll pole lines and toll aerial wire, we consider that a consistent practice should have been followed and that routine estimates should have been included in the data, as they were in his dealing with most of the other accounts. We have therefore enlarged the base from which data should be taken so as to include both specific and routine estimates, with the result that we have increased Lester's estimate on direct labor by \$75,188. Increases in overhead and omissions and contingencies are also made necessary by reason of this increase in direct labor. As to exchange aerial wire, we are of the opinion that the peculiar facts concerning that account justify an exception from the usual practice of deriving data from large and small estimates. On that account 95 per cent of the available data was from routine estimates, 5 per cent from specific estimates. In our opinion where so large a proportion of the data used was derived from small routine estimates, the result is grossly unlike reproduction conditions, and the conclusions reached from a study of specific estimates, however few in number, are more reliable. We therefore approve Lester's study of exchange aerial wire based on specific estimate performance. Furthermore, this account is peculiarly one in which large

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

scale production would result in lower labor cost. As stated by Angove, "The labor cost of placing aerial line wire under the reproduction program would be lower than performance for the reason that the line wire would be placed in comparatively larger quantities at one time." (Exhibit 33, p. 79.) We think the same situation would exist in other portions of the construction program, though perhaps to less extent.

As before indicated, we also approve the general principle of the second Lester reduction. With the exception of two accounts (exchange aerial wire and underground conduit), we have taken present-day costs based on 1928 to 1930, or 1929 to 1932 performance, and decreased them by the percentage that 1929 wage rates of telephone company employees were below the weighted average of 1928 to 1930 wage rates. The exception as to aerial wire we have explained. The specific estimate performance is adopted by us, and then the second deduction based on wage rates has been applied. As to underground conduit, we have followed the Lester method. Statistical errors in its application have been corrected. We have not eliminated all costs in excess of the 3-year performance experience, because both Lester and Angove recognized that reconstruction cost would exceed the average of operating data for the period. The reason is that most of the data on this account was taken from work in residential districts, whereas much of the reproduction work on underground conduit would be done in congested business districts. (Tr. p. 470.) Lester himself for this reason in-

creased this estimate above the average of the data, although not to the extent advocated by Angove. We have approved Lester's estimate and have then made the percentage changes in wage rates to trend this account to 1929 wage rates, as in the other instances. Although we have approved the broad principle of the Lester reductions, we cannot approve all of the calculations made by him in the purported application of the principle. A proper mathematical application of the methods which we have approved was made and checked by the engineers for both parties under the direction of the court and with the consent of both parties and is attached hereto as an exhibit. The result is that we have found as the direct labor cost of reconstruction the sum of \$6,350,521 as compared to Lester's estimate of \$5,855,662, and the Angove estimate of \$7,356,516.

### *Overhead*

[17] The evidence relative to overhead supports our previous conclusions concerning labor. Overhead costs in Oregon, expressed as a percentage of direct labor costs, decreased materially as volume of labor costs increased. Even considering overhead costs in the three Pacific Coast states (which we do not accept as a fair example in the face of Oregon experience), it is conceded by the company that "careful examination of these data does disclose some downward trend as volume increases." Beginning with the year in which there was the least annual labor cost, and arranging the years progressively from the smallest annual volume to the largest, the overhead costs stated

as a percentage of annual labor cost in Oregon were as follows (Exhibits 67 and 68): 1933, 80.36 per cent; 1932, 76.04 per cent; 1931, 66.27 per cent; 1927, 63.23 per cent; 1926, 70.41 per cent; 1925, 62.68 per cent; 1930, 59.74 per cent; 1929, 42.93 per cent.

With the sole exception of 1926, the percentage of overhead costs decreased each year as the volume of labor cost increased. Lester, on the basis of a prophetic curve line, estimated that overhead in a reproduction cost project would be still further reduced below the 1929 experience. He ultimately concluded that overhead should not exceed 38.64 per cent, stated as a percentage of labor. His prophecy is weakened by the fact that he himself first adopted 42.93 per cent, derived from 1929 experience, and that his further reduction was the result not of additional evidence but of contemplation. We are satisfied that 42.93 is fair to both parties. The company has failed to produce clear or satisfactory evidence justifying any greater percentage. We have fixed overhead at that figure on company work and we have fixed overhead on contractors' work at 9.84 per cent, based on actual experience with contract work.

We have fixed overheads at \$2,908,367, as compared with \$2,341,225 found by Lester and \$4,219,437 claimed by the company (Exhibits 32 and 33; plaintiff's reply brief, appendix B, sheet 1).

#### *Incidentals*

Concerning incidentals we have substantially followed the Lester estimates with two corrections to adjust

the amount to the general method the court has adopted. The amount approved is \$3,642,936, as compared with \$3,500,421 fixed by Lester and \$3,778,768 claimed by the company.

#### *Omissions and Contingencies*

[18] The extreme thoroughness with which the company has made its reproduction cost studies convinces us that little if anything has been overlooked. The amount claimed for omissions and contingencies is based on mere speculation. In the opinion of Hardinger, one per cent was a sufficient allowance. However, it appears that the Commissioner allowed over 2 per cent. In our opinion 2 per cent is ample. Bauer & Gold, *supra*, 183. Upon that basis we have calculated this item. The total allowance for omissions and contingencies is \$604,314 as compared to \$621,735 by Lester and \$1,103,257 by Angove.

#### *Other Expense*

[19] Interest during construction should be calculated at 6 per cent instead of 7 as claimed by the company. It should be figured for the construction period and should include interest on each uncompleted portion of the property until that portion is ready for operation. Interest should not terminate when the first unit is put into operation as claimed by the defendant. The amount allowed is \$786,644 as compared with \$764,526 allowed by Lester and \$1,042,900 claimed by the company.

Working assets include cash, employees' funds, due from subscribers and agents, and materials and supplies. We have approved the Hardinger estimate of working assets, reduced



# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

only by the sum of \$220,842, which is the error conceded by the company and which error appears to have been carried into the Hardinger study. The amount allowed is \$867,941, as compared with the Lester allowance of \$843,728 and the company claim of \$976,058.

[20] The company contends that we should include in our estimate the sum of \$454,400 for undistributed construction expense. We have allowed \$110,000, which is somewhat in excess of the amount which would be required for taxes. We concede the authority of *Ohio Utilities Co. v. Public Utilities Commission*, 267 U. S. 359, 69 L. ed. 656, P.U.R.1925C, 599, 45 S. Ct. 259, which was cited by the defendant, but find it not in point. The discussion in that case related to an arbitrary and total elimination of organization expense. We have made specific allowance for that item in the exact amount claimed by the company. We do not reject the company's claim of \$454,400 undistributed construction expense merely because there is no proof of actual expenditure. Reproduction value is not a matter of outlay but of estimate, as stated in the case cited; but, as also stated, "Proof of actual expenditures originally made," though not indispensable, would be helpful. Undistributed construction expenditures include engineering, superintendence, law expenditures, taxes, and miscellaneous. For taxes we have made ample allowance. Expenditures for superintendence, law, etc., wherever possible, are allocated to the fixed capital accounts to which they relate, and have been so allocated in the Angove study (Exhibit 33). In addition to

13 P.U.R.(N.S.)

these specific allocations we have allowed for omissions and contingencies. There is no evidence satisfying us that there will be any such expenditures that cannot be allocated. Experience indicates that there are none, and there is peculiar risk of duplication in this instance. To be sure, we are estimating for the future, and proof of actual expenditure is not indispensable, but the fixed capital accounts and omissions and contingencies are also estimates and they amply provide for law, engineering, superintendence, and the like, and perhaps even for taxes (plaintiff's brief, p. 99). The Commissioner's engineer has allowed \$200,000 for organization and \$40,000 for franchises. We accept his estimates as correct.

There is no controversy concerning the estimates for land, general equipment, or building contractors' bills. We therefore allow these items as follows: [Table omitted.]

We have accorded prima facie validity to the Commissioner's findings in so far as he made and disclosed them and we estimate the reproduction cost new of the property used and useful in telephone service within the state of Oregon to be as follows: [Table omitted shows total of \$33,536,573.]

There being a net decrease since 1932 in plant, equipment, and working assets in the amount of \$242,381, we have deducted that sum from the 1932 reproduction cost new and arrived at the sum of \$33,294,192 as the reproduction cost as of December 31, 1933.

*Reproduction Cost New Less Actual Depreciation*

[21] The company contends that



the existing depreciation is \$3,053,000, as appears in Exhibit 50 and succeeding exhibits. It finds the ratio of total cost less depreciation to total cost new to be 92 per cent. The defendant first asserts that \$3,053,000 "may or may not have been accepted by the Commissioner" as the proper amount (defendant's brief, p. 197). Later, however, he appears to be persuaded that it was accepted. In his brief (p. 202), he shows reproduction cost new as fixed by his staff to be \$32,710,045 and depreciation to be \$3,053,000, also fixed by the staff. The Commissioner asserted in the order (p. 19 [8 P.U.R.(N.S.) at p. 78]) that the actual depreciation testified to by the engineer for the Commission was \$3,053,000.

Beyond question Lester adopted 92 per cent as the per cent condition of the property in his calculations (see plaintiff's reply brief, p. 86), and the Commissioner approved the result. He knew that the Angove reproduction cost was \$38,279,800 and that approximately 8 per cent of it was taken as observed depreciation. He knew that the reproduction cost adopted by Lester and approved by himself was about five and a half million less, or \$32,710,045, but the Commissioner computed actual depreciation by taking approximately 92 per cent of Angove's figure. In effect he computed 8 per cent depreciation on \$5,500,000 of value the existence of which he denied. Such method was indefensible. The approved percentage must be applied to the approved value.

[22-24] Notwithstanding the fact that the Commissioner seems to have approved the company's finding of 92 per cent condition, the defendant now

contends that he could or should, and perhaps did, adopt 15 or 16 per cent (defendant's brief, p. 203). The company determined actual depreciation by physical inspection in the field. The work was done by highly trained and competent men, and we have not found a word of criticism in the transcript or brief as to the fairness with which their adopted method was applied. The method was to ascertain per cent of service condition as compared to condition new. They did not determine that condition by vague estimates of an actuarial nature but by technical inspection and tests. They also consider "nonphysical" items such as inadequacy, requirements of public authorities, and obsolescence when those items presently existed and could be specifically identified (Miller Exhibit 51, p. 1).

The loss of value described as existing depreciation must be determined on the same theoretical and practical basis as the value from which the loss is deducted. Neither value nor loss of value of utility property can be determined as a business man would make the determination for nonutility property. Market value is not relevant. Utility property is not bought and sold. There is no market by which value can be measured. Exchange value in private business is largely determined by a capitalization of earning power. Utility value cannot depend on earnings because earnings themselves depend on value first determined.

Justice Brandeis has stated the rule, which is unchallenged in theory though often forgotten in practice:

"But so long as the specific items of property are employed by the util-

# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

ity (in public service) their exchange value is not of legal significance." Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commission, 262 U. S. 276, 290, 67 L. ed. 981, P.U.R.1923C, 193, 201, 43 S. Ct. 544, 31 A.L.R. 807.

Again, it is well said:

"... in a public utility the property has only its service value, and not any exchange value usual in properties not devoted to a service." Indiana Bell Teleph. Co. v. Indiana Pub. Service Commission (1924) 300 Fed. 190, 202, P.U.R.1925A, 363, 378.

"It is also interesting to note that in establishing 'fair value' in Smyth v. Ames (*supra*) a new concept of value came into existence. The court did not have in mind the kind of value about which political economists had written—it was neither exchange value no intrinsic value. It was not value in trade, that is, worth measured by some standard of purchasing power. It was not market-price or market-value, because that is largely determined by earning capacity. . . . The court had in mind the worth of the property used in the service—the utility of the utility's property." Public Utility Rate Making, Groninger, p. 38.

It therefore appears that since "value" means utility or service value, actual depreciation (a deduction from value) should likewise be calculated on the basis of loss of service value. Per cent condition is rightly deemed the most significant element in arriving at reproduction cost less depreciation.

The only evidence which could be thought to contradict the comprehensive showing of 92 per cent condition is found in the amount of the depreciation

reserve. If we assume that the depreciation reserve was properly built up and is the result of only proper annual charges for depreciation expense, and if we further assume that at a given time the reserve should be equal in amount to the observed depreciation, then we would be justified in deducting from reproduction cost new an amount equal to the reserve. Both of these assumptions are false.

The Commissioner ardently urges that the reserve is the result of excessive charges to depreciation expense, and we agree that this is true. And as said by Justice Hughes:

"As the accruals to the depreciation reserve are the result of calculations which are designed evenly to distribute the loss over estimated service life, the accounting reserve will ordinarily be in excess of the actual depreciation." Lindheimer v. Illinois Bell Teleph. Co. (1934) 292 U. S. 151, 78 L. ed. 1182, 3 P.U.R.(N.S.) 337, 349, 54 S. Ct. 658.

Under these circumstances the amount of depreciation reserve is not even reliable evidence of actual depreciation.

The defendant cites two cases in support of his contention that actual depreciation should be fixed in an amount greater than the amount established by field inspection. In the case of Illinois Bell Teleph. Co. v. Gilbert, 3 F. Supp. 595, P.U.R. 1933E, 301, the district court fixed actual depreciation at 16 and later at 15 per cent. In the case of New York Teleph. Co. v. Prendergast (1929) 36 F. (2d) 54, 66, P.U.R.1930B, 33, 53, the district court, after considering the depreciation reserve, held that the company had failed to meet the

burden of proof on its claim of reproduction cost less depreciation. The court said of the company:

"When it built up its reserve, it claimed the reserve as its actual depreciation. It cannot now take an inconsistent position about depreciation, without fully establishing it, and it has weakened its proof of present value accordingly. The plaintiff was right about depreciation when it created its reserve, and it is wrong, in its position now, in its claim for a lesser sum as actual depreciation in this effort to establish a fair value."

This argument is inapplicable here for the reasons already stated. Its authority is also destroyed by the United States Supreme Court in the very recent case of *West v. Chesapeake & P. Teleph. Co.* (1935) 295 U. S. 662, 79 L. ed. 1640, 8 P.U.R.(N.S.) 433, 55 S. Ct. 894. In that case the lower court had arrived at value by deducting depreciation reserve from cost. This was done, not because it believed that depreciation reserve was the legal measure of actual depreciation, but because it deemed the depreciation reserve to be satisfactory evidence of actual depreciation sufficient to overcome the testimony of the one company witness who had given evidence concerning per cent condition in the field. The lower court relied strongly on the *Prendergast Case*, *supra*, but on this very point the United States Supreme Court reversed the lower court. Notwithstanding the language of the lower court, the Supreme Court concluded that in effect the depreciation reserve had been accepted as the measure of actual depreciation. This method was repudiated as arbitrary.

We do not know what the evidence

was in the *Gilbert Case*, *supra*, but we do know that another district court in the same case, though under a different title, had fixed actual depreciation at only 10 per cent. *Illinois Bell Teleph. Co. v. Moynihan*, 38 F. (2d) 77, P.U.R.1930B, 148. More conclusive still is the final decision of the United States Supreme Court in the same controversy. In the *Lindheimer Case*, *supra*, the evidence as to actual depreciation was almost identical to that in the case at bar. It showed the property to be in 92 per cent condition. Full weight was given to this evidence, and instead of rejecting the company's contention as to value and accepting its claims as to depreciation expense and depreciation reserve it accepted as true the claims of 92 per cent condition and, reasoning from that premise, it concluded that the property had been kept at this high per cent of condition by the expenditure of large sums for current maintenance (including replacements). The real trouble arose from excessive and unnecessary charges for depreciation expense, when actual depreciation had been reduced to a minimum by maintenance.

The method used by the company in the case at bar for determining existing depreciation has been expressly approved by the Supreme Court:

"Facts shown by reliable evidence were preferable to averages based upon assumed probabilities." *Pacific Gas & E. Co. v. San Francisco*, 265 U. S. 403, 406, 68 L. ed. 1075, P.U.R. 1924D, 817, 819, 44 S. Ct. 537; *McCardle v. Indianapolis Water Co.* (1926) 272 U. S. 400, 71 L. ed. 316, P.U.R.1927A, 15, 47 S. Ct. 144; and see full discussion to the same effect

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

in Southern Bell Teleph. & Teleg. Co. v. South Carolina R. Commission (1925) 5 F. (2d) 77, 95, P.U.R. 1926A, 6.

The evidence before us overwhelmingly supports the company's contention that the property is in 92 per cent service condition. That per cent must therefore be applied to the reproduction cost new as found by this court. The "actual depreciation" is therefore \$2,663,535.36, and we find the reproduction cost of the property less actual depreciation as of December 31, 1933, to be the sum of \$30,630,656.64.

### *Excess Plant*

[25] Although it is beyond our powers of deduction or analysis to determine how the Commissioner arrived at fair value, we do know that from some value, unknown and unstated, which must have represented the reproduction cost new of the entire property in the inventory, he deducted \$5,221,358 as "excess plant." In 1929 and 1930 net additions to plant were made in the approximate amount of \$6,000,000, but the Commissioner in his order makes no criticism of these expenditures. His claim of excess plant is not based upon them. His conclusion concerning overabundant or excess plant is the result of a comparison between the years 1930 and 1933. The Commissioner says:

"With the large 1929 construction program ample plant was in existence for 1930 business. . . . A liberal plant was in existence in 1930 and was increased 18.17 per cent for 1933." (Order p. 20 [8 P.U.R. (N.S.) at p. 79].)

Thus it appears that his conclusions were not based upon the construction

program of 1929 and 1930 but that, on the contrary, he relied upon events subsequent to December 31, 1930. His order (p. 5) shows that there was a drastic decrease of business each year from December, 1930, to December, 1933. If it is true, as the Commissioner says, that the plaintiff increased 1933 plant 18.17 per cent above the 1930 plant at a time when business was rapidly decreasing, then a strong inference of imprudent overconstruction would arise. His statement, however, is incorrect. But for the presumption of good faith which surrounds official action we should be constrained to doubt the candor and sincerity of his assertion. The statement can deceive no one familiar with the record or the order, but this is a matter of grave general interest and the public may well have been deceived.

Exhibits 16 and 16-A, prepared by Lester, are the source of the Commissioner's data. His own exhibits show that the average fixed capital on December 31, 1930, was \$36,763,847.83, and that on December 31, 1933, it had fallen to \$36,144,838.65, a decrease of more than \$600,000. The truth is that the Commissioner acted upon the theory that the fair value of the plant must have decreased in direct ratio with the decrease in the use of telephone facilities by subscribers.

It is mathematically demonstrated in the plaintiff's reply brief (pp. 95, 96) that the Commissioner ascertained the amount of fixed capital in the accounts listed in the order (pp. 19, 20) as of December 31, 1930 (Exhibit 8, p. 8), divided that total by the number of telephone calls in 1930 and determined that the fixed capital per

thousand calls in 1930 was \$119.53. He followed the same procedure for 1933 and found that the fixed capital per thousand calls was \$141.25. Comparing the two he found the 1933 increase in fixed capital per thousand calls to be \$21.72. This increase amounts to 18.17 per cent of the amount of fixed capital per thousand calls in 1930. He next reasoned that there were 240,394,044 calls in 1933, and since the fixed capital for each thousand calls was \$21.72 more than it was in 1930 he multiplied the number of thousand calls by 21.72 and arrived at exactly \$5,221,358.63. This amount he describes as "excess plant or change in popular demand," and this amount he deducts from the reproduction cost of the inventoried property as found by his engineers. This process involves every fallacy that would be incident to an attempt to fix valuation of utility property by capitalizing earnings. The rule if valid must work both ways. If a company without any change in the amount or condition of its fixed capital should enjoy a large increase in the number of calls as the result of an increase in customers its revenue would also largely increase. The Commissioner's method would necessarily entitle the company to an increase in the rate base on which it could claim a fair return merely because it had enjoyed an increase in the return on the old rate base. This is the vicious circle in its most perfect form.

The only precedent for this procedure which has come to our attention is to be found in a decision of the Missouri Utilities Commission which met ultimate disaster at the hands of a 3-

judge court in the case of Laclede Gas Light Co. v. Missouri Pub. Service Commission (1934) 8 F. Supp. 806, 6 P.U.R.(N.S.) 10, 13. The case is on all fours with the one at bar. The court said:

"Again, because of a temporary decrease in the company's business the Commission applied a percentage reduction to the valuation of all the company's property on the theory that if the use of property falls off by 4.9 per cent then 4.9 per cent of the property is not longer useful and should be devalued accordingly. A valuation reached by incorrect methods cannot be sustained. Chicago, M. & St. P. R. Co. v. Idaho Pub. Utilities Commission, 274 U. S. 344, 351, 71 L. ed. 1085, P.U.R.1927D, 340, 47 S. Ct. 604. This theory seems to us fundamentally unsound."

We are not sitting, as does the United States Supreme Court, to review only constitutional questions, but as a state court charged with the duty of determining whether the order of the Commissioner is lawful under either the common or statutory law of this state or under the Federal Constitution. The fact that there is no decision of the Oregon supreme court approving or condemning the method of valuation employed by the Commissioner does not relieve us from the duty of deciding the question. In our opinion such a method of valuation when applied to utility property must be held invalid as a matter of law. Furthermore, the recent case of West v. Chesapeake & P. Teleph. Co. *supra*, is authority for the proposition that the process employed by a Commission may be so wanting in sound principle as to violate the due process clause of



# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

the Constitution from the procedural standpoint regardless of whether or not substantive confiscation is established. In such a case a court exercising judicial functions only need not burden itself with the task of selecting and applying a sound method but will enjoin the Commission's order and leave it to the administrative arm of the government to work out and apply a more suitable one. We incline to the view that the rule of the West Case is applicable here. We have, however, assumed the burden of determining substantive confiscation *vel non* upon the evidence. The Commissioner's elimination by one stroke of the pen of \$5,221,358 from value must be rejected.

Though the order of the Commissioner made no criticism of the development program of 1929 and 1930, this court requested an analysis of the betterments made in those years, to the end that we might independently determine if the added investment was used and useful and was prudently made. We have carefully examined the company's analysis (reply brief, Appendix A) and the Commissioner's criticism of it. The Commissioner comments upon the insufficiency of the data. The company had no notice that the propriety of the 1929-30 program was in question until the final arguments in this court. The evidence satisfies us, however, that the 1929-30 additions were not improvident. The construction program of a large utility must of necessity be adopted for a distant future on the basis of past trends. In this case the program was adopted while demand was on the increase. Its provision for 8,000 more stations than were in ac-

tive use was reasonable. Much of the addition to plant related to the provident substitution of dial for manual phones. Of the total net additions to plant in those years \$3,060,125.78, or about one half, constituted additions to the toll outside plant. The Commissioner has elected to value exchange property separately from toll. Additions to toll plant are allocated to toll in the valuation studies. It follows that whether or not additions to toll plant were prudently made is immaterial upon the issue as framed by the Commissioner. We shall not condemn additions which the Commissioner did not criticize.

## Going Concern Value

[26] The company contends that we should make a separate and additional allowance of \$2,500,000 to cover the element of value as a going concern. It seeks to justify the Angove estimate of reproduction costs new as of December 31, 1932, in the sum of \$38,058,958. It fixes reproduction costs new less observed depreciation, at \$35,005,958, to which it adds going concern value in the sum of \$2,500,000, making a total of alleged value of \$37,505,958. Strangely, however, this sum is \$726,800 in excess of the amount which the plaintiff now claims as the fair value of the property. In its complaint the company adopts the Fleager estimate of fair value, namely, \$36,779,158 as of 1932. On the basis of plaintiff's own complaint we are compelled to discount its claim of reproduction costs, less depreciation, or its claim of going concern value by \$726,800.

Going concern value is the added value of the plant as a whole over the



sum of the values of its component parts, which is attached to it because it is in active and successful operation and earning a return. *Knoxville v. Knoxville Water Co.* (1909) 212 U. S. 1, 53 L. ed. 371, 29 S. Ct. 148.

It is a property right which must be considered in arriving at a fair value. *Des Moines Gas Co. v. Des Moines*, 238 U. S. 153, 59 L. ed. 1244, P.U.R.1915D, 577, 35 S. Ct. 811; *Los Angeles Gas & E. Corp. v. California R. Commission*, 289 U. S. 287, 77 L. ed. 1180, P.U.R.1933C, 229, 246, 53 S. Ct. 637. Going value does not properly include that "element of value which inheres in the fixed and favorable consideration of customers, arising from an established and well-known and well-conducted business," nor are we at liberty to consider such element of good will on this issue of confiscation. *Willcox v. Consolidated Gas Co.* (1909) 212 U. S. 19, 53 L. ed. 382, 29 S. Ct. 192, 48 L.R.A.(N.S.) 1134, 15 Ann. Cas. 1034.

In a word, "upon proof of its existence" going value "may have a place in the base upon which rates are to be computed." *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 290, 78 L. ed. 1267, 3 P.U.R.(N.S.) 279, 54 S. Ct. 647. The difficulty is not in the statement of the principle but in its application.

We must first seek to ascertain what is meant by going value.

Included in going value, as usually reckoned, is the investment necessary to organizing and establishing the business which is not embraced in the value of its actual physical property. *Des Moines Gas Co. v. Des Moines*,

*supra*. It seems to include "inception cost." The court, in the *Des Moines Case*, *supra*, designates these items of expense in development as overhead charges. In that case the master arrived at total physical value, which included specific sums for working capital and organization expense. The master also included a specific sum computed on a percentage basis, for overhead charges as a part of the value of the physical property. These charges he defined as including time and money expended in promotion and organization of the business, legal expenses, obtaining franchises, cost of incorporation, securing engineers, plans, specifications, etc., losses from accidents, contingencies, cost of administration and superintendence, interest during construction, and taxes during construction. In the first instance, the master allowed \$300,000 as an additional specific sum to cover going concern value, but after reading *Cedar Rapids Gas Light Co. v. Cedar Rapids* (1912) 223 U. S. 655, 56 L. ed. 594, 32 S. Ct. 389, he eliminated that sum. He concluded (as stated by the Supreme Court) that "applying the rule of the *Cedar Rapids Case*, he had already valued the property in the estimate of what he called its physical value, upon the basis of a plant in actual and successful operation." (P.U.R.1915D, at p. 589.) The Supreme Court therefore said: "When, as here, a long-established and successful plant of this character is valued for rate-making purposes, and the value of the property fixed as the master certifies upon the basis of a plant in successful operation, and overhead charges have been allowed for the items and in the

# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

sums already stated, it cannot be said, in view of the facts in this case, that the element of going value has not been given the consideration it deserves. . . ." (P.U.R.1915D, at p. 589.) The plaintiff has cited this case to the court, but plaintiff can take little comfort from it. The master's valuation was approved by the court. The allowance of going value as a separate item was the crux of the case, for if the additional \$300,000 had been allowed the court would have found the rates confiscatory. The item was disallowed.

Another authority has said: "The concrete measure of going value is generally the costs of attaching and developing the business over and above the cost of the construction of the plant." Groninger, Public Utility Rate Making, p. 111. The going value rule, "does not give license to mere speculation." Los Angeles Gas & E. Corp. v. California R. Commission, *supra*. Again, "Going value is not something to be read into every balance sheet as a perfunctory addition. . . . it calls for consideration of the history and circumstances of the particular enterprise." Dayton Power & Light Co. v. Ohio Pub. Utilities Commission, *supra*, at p. 292 of 3 P.U.R.(N.S.); Galveston Electric Co. v. Galveston, 258 U. S. 388, 66 L. ed. 678, P.U.R.1922D, 159, 42 S. Ct. 351. In the Dayton Case, *supra*, at p. 293 of 3 P.U.R.(N.S.) the court added: "We cannot in fairness say that after valuing the assets upon the basis of a plant in successful operation, there was left an element of going value, to be added to the total." And see Denver v. Denver Union Water Co. 246 U. S. 178, 62 L. ed. 649,

P.U.R.1918C, 640, 38 S. Ct. 278; Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission (1934) 292 U. S. 398, 78 L. ed. 1327, 4 P.U.R.(N.S.) 152, 54 S. Ct. 763, 91 A.L.R. 1403.

Thus we are directed by the authorities to consider the circumstances of this particular case. Bearing in mind the component elements of going value, as indicated in the Des Moines Case, *supra*, we must turn to the values approved by us in the instant case. We have allowed \$2,908,367 for overhead, \$3,642,936 for incidentals, \$766,000 for interest during construction, \$867,941 for working assets, \$110,000 for undistributed construction expense, \$604,314 for omissions and contingencies, \$200,000 for organization, and \$40,000 for franchises. The last item was approved by the Commissioner's engineer and we have also allowed it, though the item is subject to grave doubt in view of the fact that this court judicially knows the plaintiff company to have been operating without any franchise in the city of Portland since 1927. Portland v. Pacific Teleph. & Teleg. Co. Multnomah County Circuit Court, Case No. N-1594. These allowances go very far in following the mandate to reproduce the property as a "living organism," as distinguished from "bare bones." Los Angeles Gas & E. Corp. v. California R. Commission, *supra*.

But this is not the end. All the valuations have been based upon the Angove study, subject to such specific deductions as have been necessary. "Plaintiff's Exhibit 33" is an eloquent testimonial of the fact that substantially all the elements included in going value were taken into considera-

tion in every step of the reproduction cost study. Angove's costs, among a multitude of other items, include expense incident to the inception of the idea, employment of engineers, making of estimates, counsel fees, franchises, organization expense, costs of incorporation, "creation of a definite organization," to secure capital, and "securing and building up of the business." It involves expense of "service of a man who understands the telephone business from the standpoint of dealing with the public, of selling service and securing subscribers, and the general relations between a public utility and its subscribers. . . . He will at once begin an advertising campaign. . . ." (Exhibit 33, p. 6.) Later he "widens the scope of the advertising campaign and secures tentative promises of prospective subscribers. . . ." (Exhibit 33, p. 9.) The entire process by which the company arrived at reproduction costs is impregnated with the idea that a successful going concern is being reproduced.

Furthermore we are studying the reproduction costs and fair valuation of a company, plant, and business which is intimately affiliated with the American Telephone and Telegraph Company, and with the Western Electric Company. Under such circumstances, a successful going concern would be established with great speed and relatively small expense. The parent corporation would quickly breathe the breath of vigorous and successful life into its offspring.

We have given constant and conscious consideration to going concern value at every step of the process. Its presence is recognized, but due allow-

ance for it has already been made. We can include no additional sum without duplication.

[27] The company asserts that since Fleager estimated going concern value at \$2,500,000, which was uncontradicted in the record (plaintiff's brief 130) it follows that "In the absence of any evidence to the contrary the going concern value of the company's property must be accepted as \$2,500,000" (p. 137). This proposition we repudiate.

Opinion evidence as to value even if entitled to some weight has no such conclusive force that there is error of law in refusing to follow it. "This is true of opinion evidence generally, whether addressed to a jury or to a judge. . . ." *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission*, headnote 7 (78 L. ed. at p. 1275) *supra*; *Paine v. Meier & Frank Co.* (1934) 146 Or. 40, 27 P. (2d) 315, 29 P. (2d) 531; *Hasbrook v. Lynch* (1934) 146 Or. 363, 30 P. (2d) 358. The rule applies to all opinion evidence, but especially as to value, and most particularly as to going concern value where speculation is piled upon inference to reach the result.

#### *Fair Value*

[28, 29] We now approach the problem of fair value. Reproduction cost new less depreciation is a guide but not a measure. "An honest and intelligent forecast of probable future values made upon a view of all of the relevant circumstances" is essential. *Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commission*, 262 U. S. 276, 67 L. ed. 981, P.U.R.1923C, 193, 43 S. Ct. 544, 31

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

A.L.R. 807. Book cost also is relevant and important, its weight depending on the trend of values and prices over the period considered.

Reproduction new less depreciation as found by this court is less than the book cost of the property. This conclusion, already reached, is verified by the general decline of prices from the high levels of the period during which most of the plant was built to the lower levels of 1932 and 1933, a fact of which we take judicial notice.

[30] We are required, however, to give serious consideration to the fact of actual historical cost of construction, the amount of which is conceded. Annual Report, Exhibit A, p. 172; Tr. pp. A-164 and 165; Smyth v. Ames (1898) 169 U. S. 466, 42 L. ed. 819, 18 S. Ct. 418; Clark's Ferry Bridge Co. v. Pennsylvania Pub. Service Commission (1934) 291 U. S. 227, 78 L. ed. 767, 2 P.U.R. (N.S.) 225, 54 S. Ct. 427.

In view of the historical cost of the property and of some apparent upward trend in prices, of which we take judicial notice, and having given full weight to all of the component elements of fair value as judicially established, we now find the fair value of all of the property of the plaintiff company in Oregon used and useful in the service of the public to be \$31,500,000.

### *Separation of Property*

[31, 32] The order of the Commissioner has lowered rates only for local or exchange service, and upon the basis of a separate valuation of the property deemed by him allocable to that service. The order indicates and the brief of defendant concedes that

the Commissioner allocated 65.47 per cent of the total property in the state to exchange and 17.7 per cent to toll. He also found that 73.52 per cent of existing depreciation should be allocated to exchange and 12.59 per cent to intrastate toll (Order p. 22 [8 P.U.R. (N.S.) at p. 80] defendant's brief, pp. 256, 257). The company, on the other hand, contends that 66.22 per cent of the total property should be allocated to exchange and 17.28 per cent to toll. The remaining 16.5 per cent represents, of course, interstate or nontelephone property.

Defendant asserts that exchange properties are "subject to heavier and more constant usage, which would increase the depreciation rate" (defendant's brief, p. 256). In short, that 65.47 per cent of value is exchange value but that 73.52 per cent of loss of value by depreciation is exchange loss.

In the first place, we are not directly concerned with the rate (or speed) with which the property depreciates, but rather with the actual condition of specific property. Our question is: What portion of the total existing depreciation has occurred as to specific groupings of property? A portion of the actual depreciation was suffered by property exclusively used for exchange purposes, and a portion by property jointly used for both purposes (Tr. p. 967). Where the physical use could be specifically identified the property was allocated to exchange or to interexchange according to use. As to such specific property it is conceivable that the property allocated to exchange may have depreciated to either greater or less extent than specific property allocated to toll. The defendant's difficulty at this point is

with the facts. He argues that the exchange property has suffered greater depreciation. There is no citation to nor does our search discover any supporting evidence in the record. The entire evidence is to the contrary (Exhibit 50), and tends to show a slightly higher per cent condition of property principally used in local service than of property principally used in toll service.

The defendant's contention as to depreciation existing in the specific property identified by physical use and so allocated therefore fails for want of any evidence to support it. But the bulk of the property cannot be thus specifically identified by physical use. Most of the property is jointly used and the allocation is made not of the property but of its value on the basis of a time-use study. To illustrate, Exhibit 64, p. 8, shows a total reproduction cost according to Angove of \$38,279,800, of which the local portion of jointly used exchange was over twenty-three million dollars and the intrastate toll portion of jointly used exchange was a half million dollars more. Thus, the portion of the property which could not be identified and allocated by reference to physical use, but which was jointly used and allocated only by reference to value on a time-use basis, amounted to more than 60 per cent of the whole.

We do not approve the values included in the Angove study, but we may properly assume that the proportionate part of value which represents property jointly used has been accurately determined. Over 60 per cent, then, of the total fair value as determined by us represents property jointly used. The allocation is of val-

ue, not of specific property; but the thing that depreciates is an identified mass of tangible property jointly used. We are unable to understand how the undivided fractional part of a mass of jointly used property, the value of which is allocated to exchange, can be depreciated to any other or different degree than would be true of the other undivided fractional part of the same identical joint property allocated to toll. Value and loss of value of identical property must be allocated on the same percentage basis. It follows, though for different reasons, that both joint property and the separate property must be allocated by the application of a single ratio. We consider ourselves bound to apply the station-to-station method in allocating the property. *Smith v. Illinois Bell Teleph. Co.* (1930) 282 U. S. 133, 75 L. ed. 255, P.U.R.1931A, 1, 51 S. Ct. 65. Property separately used must be separately allocated; property jointly used must be allocated on the basis of use.

After examining the record we are unable to ascertain the source from which the Commissioner derived his separation percentages. The method by which the company arrived at its separation factor was correct, and when applied to the values claimed by the company it produced a correct result—66.22 for exchange property and 17.28 for intrastate toll. Applying the same method to the valuations which we have found will, however, produce slightly different allocation factors. We find that 66 per cent of the fair value of the entire property in Oregon should be allocated to exchange and 14.4 per cent to intrastate toll.



## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

Applying these percentages, we find that the fair value of the intrastate exchange property in Oregon is \$20,790,000 as compared with \$24,193,011 claimed by the company and \$15,900,000 conceded by the Commissioner. We find the value of the intrastate toll portion of the property to be \$5,481,000 as compared with \$6,315,199 claimed by the company and \$4,925,000 allowed by the Commissioner.

### *Revenues and Expenses*

#### (1) *Current maintenance.*

[33] The Commissioner in finding net revenue of the company for 1933, evidently made a deduction from the amount of expense shown by the company's books to have been incurred in that year for "exchange repair," an item of current maintenance. Whether he actually made the deduction, or if so, what was the amount of it, no one now connected with the case is able to say with any degree of assurance, because the Commissioner made no definite finding on the subject.

He stated in the order (p. 25 [8 P.U.R.(N.S.) at p. 81]) that on the basis of repairs per station for 1933, "the amount of exchange repairs is excessive by \$216,983.34" and "on the per call basis the excess for 1933 would be \$235,826.56." Lester in his Exhibit 91 endeavored to show that the repairs for 1932 were low by \$134,843, and for 1933 were high by \$102,134; the Commissioner's counsel indicate that they think the amount is approximately \$100,000 (Brief p. 235); while plaintiff has, by means of elaborate calculations, deduced the sum of \$121,364.

This is only one of numerous in-  
13 P.U.R.(N.S.)

stances where, owing to the peculiar and evasive manner in which the order is drawn, the court and counsel and the present Commissioner are compelled to speculate upon what the former Commissioner did before attempting to determine whether what he did was right.

The only persuasive theory is that developed by witness Fleager, who testified at the hearing before the court. He was able to show that the total amount which had been deducted from expense was \$505,891, for four separate items—depreciation expense, general office salaries and expenses, general services and licenses, and exchange repairs. The first three items appear with sufficient definiteness in the order, and the amount of the exchange repair deduction, \$121,364, was obtained by subtracting the sum of the other three from the total. (Transcript of testimony before court, hereinafter referred to as Tr. A, p. 120; Ex. A-187.) This testimony was referred back to the Commissioner who made the order. He had the opportunity to correct it if it was erroneous. Not having done so, and the conclusion arrived at by Fleager being the only one brought to our attention which is consistent with other known factors, we are compelled to adopt that conclusion.

The Commissioner apparently based his action on the grounds that during the 10-year period 1924 to 1933, both inclusive, 1933 exchange repairs per station and per thousand calls were higher than during any other year except 1929, and that 1932 was a low repair year and the company postponed many of its repairs from 1932 to 1933. The company asserts that

the basis of the comparisons is not a fair one, that the amount spent on repairs should be compared with the total fixed capital.

It is not necessary to pursue that subject. It is the undisputed evidence that beginning with 1933 the company's accounting classifications were changed by order of the Interstate Commerce Commission (Ex. A-150), with the result that items of current maintenance theretofore charged to other accounts were in 1933 charged to "exchange repairs." For 1933 exchange repairs totaled \$838,809, of which amount \$119,784 would in previous years have been charged to other accounts. (Ex. 129, Tr. 2013.) Exchange repairs for 1932 were \$707,863; for 1933, when reduced to the basis of the old accounting classifications, \$719,025, which is but \$11,162 more than for the previous year, and \$362,532 below \$1,081,557, the 1929 high year.

As the court said in *West Ohio Gas Co. v. Ohio Pub. Utilities Commission* (1935) 294 U. S. 63, 79 L. ed. 761, 6 P.U.R.(N.S.) 449, 453, 454, 55 S. Ct. 316: "There is no denial, even now, that these expenses were incurred as claimed." And further: "Good faith is to be presumed on the part of the managers of a business. (Citing cases.) In the absence of a showing of inefficiency or improvidence, a court will not substitute its judgment for theirs as to the measure of a prudent outlay."

The changes in accounting classifications were called to the Commissioner's attention not only by the company's witnesses, but by his own engineers (Ex. 91), but he chose to ignore

them. They account fully for the apparently large increase in 1933 exchange repairs, and leave the Commissioner's action without any basis whatever.

(2) *Annual allowances for depreciation.*

[34, 35] The Commissioner found that an amount equal to 3.995 per cent of the depreciable fixed capital should be charged as an expense for depreciation of plant and equipment. (Order p. 28 [8 P.U.R.(N.S.) at p. 84].) For the year 1933 this amounted to \$1,304,549. The company's charges to depreciation expense for that year were based on a rate of 4.56 per cent and amounted to \$1,456,138. The difference is \$151,589. (Ex. A-187, Tr. A, p. 121.)

The company claims that no deduction from the charges for depreciation expense was proper; the Commissioner now says that the finding is too favorable to the company, and that the court should increase the amount of the deduction to \$658,234.

The Commissioner's method was this: He took the observed depreciation as of December 31, 1932, as \$2,843,296 and treated it as the balance in the depreciation reserve on that date, instead of \$7,323,359,\* the actual balance. Starting then with \$951,047, the balance in the reserve on June 30, 1912, he found that the amount that should have been charged to operating expenses for current depreciation for the years 1913 to 1932, inclusive, to produce a balance of \$2,843,296, was \$14,660,235, which is 3.995 per cent of \$366,982,001, the

\* According to Company's Exhibit 119, this balance was \$7,002,628.

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

amount of the company's average fixed capital for the period in question. (Exhibit 88, Tr. p. 1297; Order p. 28.)

The sum of \$658,234, for which the Commissioner now contends, represents the difference between the amount charged to depreciation expense, and the cost of property retired and charged to the depreciation reserve, in 1933.

We think that the Commissioner's methods were wrong. The method pursued in the order is erroneous because it proceeds upon the false hypothesis that the balance in the depreciation reserve at any given time is the measure of the observed depreciation (West v. Cheaspeake & P. Teleph. Co. [1935] 295 U. S. 662, 79 L. ed. 1640, 8 P.U.R.(N.S.) 433, 55 S. Ct. 894); the underlying assumption of the Commissioner's present contention that the company had no right to raise more money for depreciation than was actually disbursed in a particular year is fallacious. Louisiana R. Commission v. Cumberland Teleph. & Teleg. Co. (1909) 212 U. S. 414, 53 L. ed. 577, 29 S. Ct. 357.

[36, 37] We are of the opinion, however, that irrespective of the method used by the Commissioner, under the evidence he did not err in finding that the company's depreciation charges for the year 1933 were excessive.

The nature of depreciation expense and the accounting methods employed by the company with respect thereto, are thus explained in the Lindheimer Case (1934) 292 U. S. 151, 78 L. ed. 1182, 3 P.U.R.(N.S.) 337, 54 S. Ct. 658:

13 P.U.R.(N.S.)

"Broadly speaking, depreciation is . . . "4

The litigation in that case extended over a period of ten years, during which time the rates would have been effective, had their enforcement not been stayed by preliminary injunction.

The Supreme Court found, from a comparison of the company's existing depreciation with its depreciation reserve, and a comparison of the amounts annually charged for current maintenance with those credited to the depreciation reserve during this period, that excessive charges had been made for depreciation expense in each of the years in question. It was held that: "The questionable amounts annually charged to operating expenses for depreciation are large enough to destroy any basis for holding that it has been convincingly shown that the reduction in income through the rates in suit would produce confiscation." (3 P.U.R.(N.S.) at p. 352.)

The court did not attempt to find the amount of the excess charges, nor did it proceed upon the obviously erroneous theory, implicit in the defendant's contention, that any amount charged for depreciation expense in a year over and above the retirements in that year is not to be countenanced. The court was reviewing the company's actual experience under the rates in suit; it had already, for reasons presently to be considered, rejected the lower court's finding of fair value and had held that the existing rates were just and reasonable. The burden was therefore on the company to show under the test of actual ex-

<sup>4</sup> Extensive quotation, omitted, consists of six paragraphs from Supreme Court opinion in 3 P.U.R.(N.S.), beginning on page 347.

perience that its property was being confiscated. A part of that burden was the duty of proving that the excessive amounts charged to depreciation expense were not more than sufficient to compensate it for the reduction in rates. This burden it failed to carry.

In this case a like comparison of observed depreciation in the plaintiff's property, credits to the depreciation reserve and charges for current maintenance, constitute ample evidence to support the Commissioner's finding that in the year 1933 the company made excessive charges for depreciation expense in the sum of \$151,589. This finding has *prima facie* validity. Before we can disregard it, clear and satisfactory evidence must be produced to show that it is erroneous. The company, which claims that its charges for depreciation expense in 1933 were only reasonable, does not have the burden of showing that the Commissioner was too generous with it. The opinion in the Lindheimer Case, *supra*, makes sufficiently clear that the difficulty of estimating with precision the requirements of a business of this kind for depreciation expense under the straight-line method, and there is no way for us under the evidence to determine that the Commissioner's finding of excessive charges in this respect erred on the side of the plaintiff.

The brief for the defendant on this question is marked by a curious inconsistency. It is argued, or at least suggested (pp. 114, 115) that the court should treat the Commissioner's finding as of no consequence, and this in the face of the strenuous insistence of the defendant that the findings of the

Commissioner are conclusive if supported by substantial evidence. We are not at liberty to sustain the defendant in the one position any more than in the other.

Since the Lindheimer Case, *supra*, has been pressed upon the court by the defendant as decisive of the present controversy, we shall at this point undertake to determine the extent of its applicability to the case at bar. The company in that case, as we have said, alleged that its existing rates were just and reasonable, but the prescribed rates confiscatory. The company's financial history corroborated its concession as to the reasonableness of the existing rates. The Supreme Court found, under the findings of fair value made by the lower court, that the amount of net income which the company required to avoid confiscation was even greater than the net income which it was receiving under the existing rates. The court, therefore, rejected the fair value found by the lower court, and proceeded to determine the effect of the reduction through the rates in suit by the test of the company's experience under them, with the result which we have indicated.

This case establishes the rule that, where the existing rates are reasonable and the annual charges for depreciation expense *during the rate period* are shown to be excessive, the company has the burden of proving that the amount of such excess is not greater than the amount of the reduction in rates, and if it fails to sustain that burden, the rates will not be enjoined. See XXXVI Columbia Law Review, p. 250. It does not abandon "fair value," nor the modes of ascer-

# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

taining "fair value," as the basis for determining the issue of confiscation, as contended by counsel for defendant. That, we believe, is made sufficiently clear by the later case of *West v. Chesapeake & P. Teleph. Co. supra*, at p. 440 of 8 P.U.R.(N.S.), where the court, speaking of the cases of *Los Angeles Gas & E. Corp. v. California R. Commission*, 289 U. S. 287, 77 L. ed. 1180, P.U.R.1933C, 229, 53 S. Ct. 637, and *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 290, 78 L. ed. 1267, 3 P.U.R.(N.S.) 279, 54 S. Ct. 647 (decided on the same day as the *Lindheimer Case, supra*) said:

"Nothing said in either of these cases justifies the claim that this court has departed from the principles announced in earlier cases, as to the value upon which a utility is entitled to earn a reasonable return *or the character of evidence relevant to that issue.*" (Italics ours.)

In this case we are not looking to the past to see what has occurred during the rate period, as in the *Lindheimer Case*. We are looking to the future to determine the probable effect of the reduction in rates. For that purpose we have the right, and it is our duty, to examine the question whether the company's rates in 1931, 1932, and 1933 were less than just and reasonable, as it alleges. *Louisiana R. Commission v. Cumberland Teleph. & Teleg. Co. supra*.

That cannot be done by assuming a rate base as correct—either the Commissioner's, the company's, or our own; because for present purposes the question is whether we must discredit our own finding of fair value based upon the evidence of reproduction cost

new and other elements of value to which we have given consideration because of facts appearing elsewhere which might tend to discredit our conclusion. With that end in view, we go, as did the Supreme Court, to the financial history of the plaintiff.

The evidence discloses that the plaintiff's record of capital increases, payments of interest on indebtedness, payment of dividends on its common and preferred stock, and accumulation of surplus, over a long period of years, has been an impressive one. But the company operates in California, Washington, Oregon and a part of Idaho. In the *Lindheimer Case, supra*, the property involved was approximately 60 per cent of the entire investment. The Oregon property is but 14 per cent of the whole. The undisputed evidence is that during the years 1930 to 1934, inclusive, the Oregon business failed to carry its proportionate share on a plant percentage basis of dividend payments. The deficits in this respect are: 1930, \$16,911; 1931, \$421,783; 1932, \$719,993; 1933, \$1,036,377; first six months of 1934, \$434,147 (Exhibit 121, Tr. 1568). In the year 1932, \$1,337,793.20 in dividends was paid out of surplus; in 1933, \$1,700,989.60 was so paid; and in the first six months of 1934, \$743,282.53 (Exhibit 120).

In 1930, the company's gross exchange service revenue from Oregon business was \$6,200,915; in 1931, \$6,073,960; in 1932, \$5,582,960; in 1933, \$4,997,204; and for the first six months of 1934, \$2,498,257 (Exhibits 81 and 105-108, inc.). The 1933 gross revenue was less than that for 1930 by \$1,213,711.



# PACIFIC TELEPHONE & TELEGRAPH CO. v. THOMAS

Between 1930 and the end of 1933 the company lost 32,000 stations in Oregon (Order p. 5).

We are not unmindful of Mr. Chief Justice Hughes' admonition in the Lindheimer Case, *supra*, at p. 345 of 3 P.U.R. (N.S.): "Elaborate calculations which are at war with realities are of no avail." But in this case elaborate calculations harmonize with realities. 1931, 1932, and 1933 were depression years, and it is manifest that the telephone business shared in the losses which were sustained by business generally throughout the country.

The Commissioner recognized the fact in the order when he attempted to exclude from the fair value of the company's property over \$5,000,000 on the theory that the plant had been overbuilt. He said in the order (p. 19 [8 P.U.R. (N.S.) at p. 78]): "The record would indicate that the company now finds itself, as the result of changed business conditions, with an overbuilt plant, new construction and extensions not needed in the service, and with probably no prospects of their use for an indefinite period." We have held that the Commission erred as a matter of law in eliminating value for that reason, but we agree with his conclusions as to the effect of the depression on the plaintiff's business.

The evidence as to the recent financial history of the plaintiff is in marked contrast to that in the Lindheimer Case, *supra*, with respect to the financial history of the Illinois Bell Telephone Company. We find nothing in this record which impels us to reject our finding of fair value or to say that during the years 1931, 1932,

1933, the plaintiff's rates were not in fact unjust and unreasonable.

[38] It is established law, conceded by counsel for the defendant (Brief pp. 73, 121), that, although the company has made excessive charges for depreciation in the past, the balance in the depreciation reserve belongs to the company and cannot be used to make up the deficiency when unreasonably low rates are prescribed. Public Utility Comrs. v. New York Teleph. Co. 271 U. S. 23, 70 L. ed. 808, P.U.R. 1926C, 740, 46 S. Ct. 363; Knoxville v. Knoxville Water Co. (1909) 212 U. S. 1, 53 L. ed. 371, 29 S. Ct. 148; Louisiana R. Commission v. Cumberland Teleph. & Teleg. Co. *supra*. The result of the decisions is concisely summarized in Bauer & Gold, p. 213, as follows:

"Past inadequacy of provisions remain as loss upon the company. Similarly, past excessive provisions remain presumably the property of the company. Future consumers cannot be burdened with the duty to reimburse the company for past depreciation cost incurred but not charged to operation. Neither can they benefit from excessive depreciation charges to operating expenses and recovered in rates in prior periods."

The Lindheimer Case, *supra*, neither announces nor implies a departure from these principles. It has, however, a certain application to this controversy. It establishes tests by which to determine under certain circumstances the validity of a finding of fair value. These tests we have applied to the facts of the case before us, but, as we have shown, the facts are so at variance from those presented in the Lindheimer Case, *supra*, as

OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

to leave that decision without controlling force here.

We approve the Commissioner's deduction of \$151,589 from the company's 1933 charges for depreciation expense but reject his present contention that the deduction should have been larger.

(3) *General office salaries and expenses.*

[39] The amount charged by the company to expense for general office salaries for 1933 was \$228,215. The Commissioner found that the amount properly chargeable was \$90,922 and eliminated the excess, \$137,293 (Order p. 27 [8 P.U.R. (N.S.) at p. 82]). His action was based on a comparison of salaries in 1917 with those in 1933. In 1917, salaries were \$31,692. Between that year and 1933, average wage rates increased by 127.40 per cent and average number of stations by 59.49 per cent, a total of 186.89 per cent, the number of employees in 1933 being slightly lower than in 1917. (Order pp. 27, 28. Exhibit 145, pp. 1, 2, 5). The Commissioner concluded that the allowance for salaries should be the amount charged in 1917 increased by 186.89 per cent.

We pause to observe again that as in the case of exchange repair expense, it is not denied even now that the salaries were actually paid.

The company showed by convincing and uncontradicted evidence that commencing with the year 1925 there were changes in its interior organization which resulted in bringing into the general office functions which had been theretofore performed in the various departments. (Exhibit 138; Tr. 2126.) Up to the year 1926 the trend

13 P.U.R. (N.S.)

of salaries followed the trend of stations. (Exhibit 92; Tr. p. 1358.) After that general office expenses began to increase faster than the number of stations. To illustrate the reason for this, as claimed by the company, we quote from Fleager's testimony (Tr. p. 2129):

"The financial department was established in November, 1929. . . . Prior to that the cashiers had been scattered through all the departments, and it was considered advisable, both for the safety of money and the supervision of personnel in the handling of money, to have that cashier report to the treasurer. The minute he began to do that it was transferred from the expense of the departments and placed in general office expenses."

According to this witness, these changes in organization accounted for \$51,400 of the apparent undue increase in this amount.

The company further showed that \$77,548 of the increase was caused by the changes in accounting classification as prescribed by the Interstate Commerce Commission, and which became effective January 1, 1933 (Ex. A-150).

The account numbers remain the same, but additional items were drawn into them that were not included in the superseded accounts. (Tr. p. 2127, Ex. 138.)

We deem it unnecessary to go into the details of these accounts. The company's contention is clearly sustained by the record. There is nothing to refute it; and the only defense of the Commissioner's ruling which need be noticed is the claim in the brief (p. 240) that it was based on a representation made by Mr. Fleager during

the hearing (Tr. p. 2130) that his Exhibit 139, which actually shows the general office salaries and expenses as charged under the 1933 classification of accounts, was "plaintiff's statement of its office salaries account on the 1932 basis." It is not asserted now that the exhibit in fact was on the 1932 basis, but merely that Fleager so represented it and the Commissioner acted on the representation.

We shall examine this contention. The accounts involved are: 661—Salaries of General Officers, and 662—Salaries of General Office Clerks. In 1933 these became 661—Executive Department, and 662—Accounting Department, and included revenue accounting and expenses which theretofore had been charged to commercial expenses. And a new account No. 663, entitled Treasury Department, in which were placed certain expenses of that department that formerly had been carried in accounts 661 and 662 was established. (Tr. 2126.)

Exhibit 139 consists of three sheets entitled respectively: "Account 661 Executive Department," "Account 662 Accounting Department," and "Account 663 Treasury Department." These sheets contain tabulations showing general office expense for the year 1933. The total for Oregon under Account 661 is \$61,092.81, under Account 662 \$196,998.88, or the sum of \$258,091.69 in all. The exhibit was presented at page 2130 of the transcript. At page 2127 Mr. Fleager had just completed, with the aid of his graph, Exhibit 138, his explanation of the change in the accounting classifications, and had testified that if the salaries that were formerly in Accounts 661 and 662 were calculated for 1933

they would be \$150,667, instead of "about \$260,000."

Now, while Fleager's statement which accompanied Exhibit 139 is not clear, it is difficult to understand how a candid person bent on ascertaining the facts who had heard or read his testimony concerning the effect of the change in the accounting classifications, could have given his statement the construction that we are told the Commissioner and his engineer placed upon it. We cannot accept the claim, either that Fleager made the representation attributed to him or that the Commissioner thought that he made it.

The record shows that in fact there was no undue increase in general office salaries and expenses in 1933. Total operating expenses for 1933 were nearly \$300,000 less than for 1932, and lower than in any year subsequent to 1927. (Exhibit 81.)

There is no showing that excessive salaries were paid. Under these circumstances the Commissioner exceeded his authority in attempting to eliminate expenses actually and in good faith incurred by the company. His action conflicts with the principle laid down by the supreme court in *Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commission*, 262 U. S. 276, 67 L. ed. 981, P.U.R.1923C, 193, 200, 43 S. Ct. 544, 31 A.L.R. 807:

"It must never be forgotten that while the state may regulate with a view to enforcing reasonable rates and charges, it is not the owner of the property of public utility companies and is not clothed with the general power of management incident to ownership. The applicable general

# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

rule is well expressed in State P. U. Co. ex rel. Springfield v. Springfield Gas & E. Co. (1919) 291 Ill. 209, 234, P.U.R.1920C, 640, 125 N. E. 891.

"The Commission is not the financial manager of the corporation, and it is not empowered to substitute its judgment for that of the directors of the corporation; nor can it ignore items charged by the utility as operating expenses unless there is an abuse of discretion in that regard by the corporate officers."

## (4) *American Telephone and Telegraph Company contract.*

[40-43] The plaintiff claimed as an item of operating expense the sum of \$95,644 paid to the American Telephone and Telegraph Company, a corporation, pursuant to the terms of a certain so-called license contract, which calls for an annual payment by the plaintiff to the American Company of 1½ per cent of the former's gross revenue. The Commissioner disallowed the item.

The contract in question, Exhibit 80, was executed originally on May 7, 1880, by the predecessors in interest of the two companies. It grants the right to the plaintiff to use telephone instruments, to wit, the receiver, transmitter, and certain induction coils (Tr. p. 1675), under patent rights owned by the American Company, and provides for the leasing of telephones by the American Company to the plaintiff, and fixes rental and royalty charges. In 1902 the contract was modified so as to provide for payment by way of rentals of 4½ per cent of the Pacific Company's gross earnings. In 1926 the required payment

was reduced to four per cent of gross earnings. In 1927 the American Company sold to the plaintiff the apparatus which theretofore had been rented and payments under the license contract were reduced to 2 per cent of gross earnings; and in 1928 the present rate of 1½ per cent was agreed upon.

The American Company owns 85.26 per cent of the common stock and 78.17 per cent of the preferred stock of the Pacific Company (Tr. p. 1616). For the purpose of determining the validity of the contract and the propriety of the payments made thereunder, the two corporations may be regarded as departments of one large organization. The relationship existing between them makes it the duty of the court to scrutinize closely their dealings "to prevent imposition upon the community" served by the Pacific Company, and the plaintiff has a strong burden of proof to sustain the fairness of the contract and to show at least that the sums it pays to the parent corporation are reasonable in view of the services rendered and the benefits obtained, and that like services and benefits are not to be had for less from other sources. *Houston v. Southwestern Bell Teleph. Co.* 259 U. S. 318, 66 L. ed. 961, P.U.R. 1922D, 793, 42 S. Ct. 486; *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission*, *supra*; *Columbus Gas & Fuel Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 398, 78 L. ed. 1327, 1329, 4 P.U.R.(N.S.) 152, 54 S. Ct. 763, 91 A.L.R. 1403; *Indiana Bell Teleph. Co. v. Public Service Commission* (1924) 300 Fed. 190, 204, P.U.R.1925A, 363; *Chesapeake & P. Teleph. Co. v. Whitman*, 3

# PACIFIC TELEPHONE & TELEGRAPH CO. v. THOMAS

F. (2d) 938, 957, P.U.R.1925D, 407; Southern Bell Teleph. & Telegr. Co. v. South Carolina R. Commission (1925) 5 F. (2d) 77, 97, P.U.R.1926A, 6; Northwestern Bell Teleph. Co. v. Spillman (1925) 6 F. (2d) 663, 664, P.U.R.1926A, 330; Pacific Teleph. & Telegr. Co. v. Whitcomb, 12 F. (2d) 279, P.U.R.1926D, 815.

The most recent pronouncement of the Supreme Court on this subject indicates the adoption of a more stringent rule than is to be found in any of the foregoing cases. In *Smith v. Illinois Bell Teleph. Co.* (1930) 282 U. S. 133, 157, 75 L. ed. 255, 267, P.U.R.1931A, 1, 12, 51 S. Ct. 65, the court, while seeing no reason to doubt that valuable services were rendered by the American Company under a license contract with the Illinois Bell Company, said that "there should be specific findings by the statutory court with regard to the cost of these services to the American Company and the reasonable amount which should be allocated in this respect to the operating expenses of the intrastate business of the Illinois Company in the years covered by the decree." The statutory court evidently construed this language as a mandate to allow as operating expenses no more than the cost of rendering the service called for by the contract and made findings accordingly. *Illinois Bell Teleph. Co. v. Gilbert*, 3 F. Supp. 595, 605, P.U.R. 1933E, 301. On the authority of the *Illinois Bell Case* we hold that the plaintiff may not properly charge as operating expenses any greater sum than the cost to the American Company of rendering the services covered by the contract, and the

plaintiff must establish that cost by clear and satisfactory evidence.

The plaintiff has made an elaborate and convincing showing that the American Company furnishes it with advice and assistance in engineering, operating, financial, and other matters, including the prosecution of experimental and research work in telephony, from all of which the plaintiff derives great benefit, and the cost of which to the American Company exceeds \$95,644, the amount paid by the plaintiff pursuant to the terms of the contract. (Transcript pp. 1607-1702, 1744-1889, Exhibits 122-A to 122-N and 125.) We find it necessary to hold, however, that under the rule of law announced the plaintiff cannot be allowed this sum as an operating expense because the record fails to disclose with any degree of certainty the value and the cost to the American Company of the services *paid for* by the plaintiff. The sum of \$95,644 was paid by it to the American Company under the license contract and not otherwise. (Plaintiff's brief, p. 212.) The only obligation of the American Company under the contract is to give to the plaintiff the use of certain telephonic apparatus under the American Company's ownership of patent rights, and to pay the expense of prosecuting the infringements of its patents and to defend all patent suits brought for the use of instruments furnished. This is a different contract from the one considered by the court in the *Illinois Bell Case*, *supra*. The contract there provided "for advice and assistance in engineering, operating, financial, and other matters and for the prosecution of experimental and research work in



## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

telephony for the benefit of the entire system." Illinois Bell Teleph. Co. v. Moynihan, 38 F. (2d) 77, 84, P.U.R. 1930B, 148, 159. There are no such provisions in the contract with which we are dealing. The witness Heiss summarized the services rendered by the American Company as follows (Tr. p. 1618):

"A. The right to use all telephones and all telephonic devices, apparatus, methods, and systems covered by patents of the licensor; that is the American Company.

"B. Protection against the judgments for damages and profits in all actions and suits charging infringement of patents arising out of the use of any telephones, telephonic devices, apparatus, methods, or systems recommended by the licensor.

"C. The benefits derived from the continual performance by the American Company of research investigation and experimentation in the development of the art of telephony and in the development of plans, methods, systems, and ideas designed to promote safety, economy, and efficiency in the equipment, construction, and operation of the telephone plants of the licensee companies.

"D. Advice and assistance in general engineering, plant, traffic, operating, commercial, accounting, including the auditing of accounts; patent, legal, administrative, and other matters pertaining to the efficiency, economical, and successful conduct of the business of the licensee companies.

"E. The right, for the betterment of the service, to extend to connecting companies in the territories of the licensee companies the benefits of the 13 P.U.R. (N.S.)

engineering and other technical advice and information in respect to construction, maintenance, repair, and operation of plant, as it is obtained by the associated companies from the American Company.

"F. Advice and assistance in financing the telephone business; assistance in securing funds on fair terms, and in the marketing of the securities of the licensee companies.

"G. The right of connection with the long-distance system of the American Company.

"H. The active assistance and cooperation in connection with personnel matters, such as employees' sickness, accident pension, benefit activities, and other general matters."

It appears from Exhibit 125 that the cost to the American Company, allocable to Oregon, of the services which it renders to the plaintiff is over \$150,000. We have carefully examined this exhibit, and the testimony of the witness Heiss explaining it, but are unable to find therein any items relating solely to services covered by the contract. Apparently they all relate to extracontractual services such as engineering and financial advice, but if this be not so, and if some of the cost of rendering the services covered by the contract is reflected in the exhibit, it is at least certain that no segregation has been made with respect to the cost of contractual services, and the court has no way of determining the value or the cost of those services considered by themselves. The payment of \$95,644, as we have said, was made for services covered by the contract. All the other services, so far as this record discloses, were a gratuity. It follows that the

plaintiff has not sustained the burden of proof in this regard.

As grounds for his ruling the Commissioner stated, among other things, that the method of allocating the total cost of the services among the affiliated companies is improper, that the books, correspondence, and other data of the plaintiff do not disclose the services performed, the cost to the American Company or the reasonableness thereof, and that no evidence has been introduced from which the services to the Oregon Company, their necessity, cost to the holding company, or reasonableness, can be ascertained (Order p. 48 [8 P.U.R.(N.S.) at p. 107]). The Supreme Court in *Smith v. Illinois Bell Teleph. Co.* (1930) 282 U. S. 133, 75 L. ed. 255, P.U.R.1931A, 1, 51 S. Ct. 65, approved an allocation method. The evidence of the character, value, and cost to the American Company and the benefit to the plaintiff of most of the services in question is overwhelming. We cannot agree, therefore, with the reasons given by the Commissioner for his decision. We would allow the claim for operating expenses made on account of the extracontractual services if the proof had shown that the plaintiff had paid for them. Likewise, we would have allowed the claim for services performed under the contract if the proof had shown their value and cost. There is a failure of proof as to both these matters, and the Commissioner's ruling is therefore sustained.

#### *Separation of Revenues and Expenses* *Revenues.*

The board-to-board method separates the properties at the back of the

switchboard. The exchange business retains all revenue derived from exchange service; and receives from the proceeds of toll business payment for the use of certain exchange facilities for toll purposes. In other words, toll service bears a share of the expense of such facilities measured by the use to which they are put for making long-distance calls. When the station-to-station method, which we have approved, is applied, "usage of the property for toll purposes is considered as extending back to the transmitter of the calling subscriber and forward to the receiver of the called subscriber" (Ex. 126, p. 6), and toll expense is correspondingly augmented.

The parties agree for the most part as to the proper basis of the allocation of expense, though they disagree as to some of the items involved. These will be considered later.

[44-47] The dispute here arises out of the company's claim that a portion of exchange revenue should be assigned to toll. The amount involved for the year 1933 is \$151,589 (Tr. A-121). The company's claim rests upon the premise that its rate structure is built upon a board-to-board basis, which is to say that the toll charge is imposed only for the service from one exchange to another, while the exchange rates pay not only for local calls, but also for the privilege of access to the toll board,—a standby service the cost of which is included in exchange rates. The Commissioner stated: "The payment made by the subscriber for exchange service is not a part payment for exchange and toll service." (Order p. 29 [8 P.U.R.(N.S.) at p. 85].) Therein lies the crux of the controversy.

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

The company's position is supported by the testimony of several of its witnesses. (Transcript, pp. 966, 973, 1738, 1890 to 1892, 20-A, Exhibit 64, p. 2.) We quote from Exhibit 64, presented by Mr. Miller, engineer for the company: "Exchange and interexchange are defined in accordance with the rate structure, that is, exchange includes all local service, together with access to the toll board, and interexchange is service from a toll board of one exchange to the toll board of another exchange, or to a toll station." The contention also finds some support in an exhibit presented by Mr. Lester in a previous hearing before the Oregon Commission (Case U-F-388, March 21, 1924 [P.U.R.1924D, 39]), in which he stated that "readiness to serve both for exchange and interexchange connections is always a primary obligation of the exchange." (Tr. p. 2105.) Courts and Commissions which have considered the subject have expressed conflicting views. An examination of the decisions discloses that the Bell Companies have in their accounting and in their contracts with affiliates adhered the board-to-board method, including the theory that exchange rates include a standby charge for toll service. *Re Chesapeake & P. Teleph. Co. (Va.)* P.U.R.1926E, 481, 627. The question was before the Public Utilities Commission of Wisconsin in *Re Rock County Farmers Teleph. Co. (1924)* P.U.R.1925A, 178, 180, 181. The Commission said:

"The present system amounts to placing in the exchange rates paid by telephone subscribers a small readiness to serve charge for the privilege of connection with toll service. It is a

system which has been in use throughout this state, and from such information as we have, we believe it is in quite general use throughout the country. There is no showing in this case which would warrant us in overthrowing it, and it is our opinion that it constitutes a proper basis for fixing toll rates, and it is in fact the basis on which we have established the exchange rates in every case which has come before us, and on which we have conducted such investigations as we have made of the rate situation."

The Commission in that case further observed that "(they saw) no reason why the principle that the exchange subscriber should pay a small standby charge for the use of the toll system is any different from the principle that a power user should pay a standby charge for the privilege of receiving electric service, and such standby charges are almost universal in electric power rate schedules."

As stated in one of the decisions, the telephone company "contends that a subscriber may go to the central office and put in a toll call just like he may go to Western Union and send a telegram; that if he chooses to send a telegram over the telephone, it is a local use of the telephone, and if he chooses to put in a long-distance call over the telephone, it is a local use of that telephone." *State ex rel. Hopkins v. Southwestern Bell Teleph. Co.* 115 Kan. 236, P.U.R.1924D, 388, 223 Pac. 771.

The argument against the company's position is summarized in *Southwestern Bell Teleph. Co. v. San Antonio*, 2 F. Supp. 611, 619, P.U.R. 1933D, 405, 416, as follows:

"The defendants say that the plain-

tiff in the operation of its business is not consistent in its contention. For instance, local calls from pay stations are 5 cents each. If one uses the pay station, he deposits 5 cents, which sum inures to the benefit of the local exchange revenues. If the same person calls and gets long-distance service, the 5-cent coin so deposited is returned to him, and the local exchange receives no compensation for this call. Also, there is measured service, under which a person is entitled to so many calls at a flat rate. When the allotted number is exhausted, the subscriber pays 2 cents for each extra call, except when he calls the toll operator. Again, some patrons restrict their telephones to local use, yet they are required to pay the same rate as those who have the privilege of calling the toll board. These customers are forced to pay for toll service against their will and without getting it."

In that case the district court refused to enjoin the rates, and in the course of its opinion ruled adversely to the company's contention relative to the separation question. The decree was reversed on appeal (*Southwestern Bell Teleph. Co. v. San Antonio* [1935] 75 F. (2d) 880, 7 P.U.R.(N.S.) 433, 441), but nothing definite was determined as to the proper basis of separation. The court did observe, however, that: "If, as we understand, there is no direct legislation on this point and no specific action by the rate-making bodies concerned, we think it was the managerial right of the company to initiate a mode of dealing with the situation, but subject to control by the rate-making bodies and subject to the criticism of the court."

In *Public Utilities Commission v. New England Teleph. & Teleg. Co.* (1925) P.U.R.1926C, 207, 261, the Rhode Island Commission in approving the board-to-board method of separation said that it "has practically without exception met with the approval of Commissions and courts" and "that almost without exception the rate structures of the telephone companies in this country are built up on the board-to-board basis."

In *Stone v. New York Teleph. Co.* P.U.R.1921D, 736, 751, the New York Commission said: "The segregation worked out. . . ."<sup>5</sup>

On the other hand, the following Commission decisions apparently reject the company's theory of its rate structure; *Re Chesapeake & P. Teleph. Co. supra*; *Re Missouri & K. Teleph. Co.* (Kan.) P.U.R.1918C, 55, 69; *Re Northwestern Bell Teleph. Co.* (Neb. 1922) P.U.R.1923B, 112, 170; see also 3 Guiding Principles of Public Service Regulation, by H. C. Spurr, p. 758 et seq., and Baird, "Telephone Rate Making," p. 185.

The first appeal to the Supreme Court of the Illinois Bell Telephone Company Case which culminated in *Lindheimer v. Illinois Bell Teleph. Co.* (1934) 292 U. S. 151, 78 L. ed. 1182, 3 P.U.R.(N.S.) 337, 54 S. Ct. 658, is entitled *Smith v. Illinois Bell Teleph. Co.* (1930) 282 U. S. 133, 75 L. ed. 255, 263, P.U.R.1931A, 1, 8, 51 S. Ct. 65. In remanding the case to the lower court for additional findings, the Supreme Court said, with reference to the apportionment of the properties of the telephone company:

<sup>5</sup> Extensive quotation, omitted, consists of four paragraphs of decision in P.U.R.1921D, beginning on page 751.

# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

"The court found that the Illinois Company owns and operates all the property in the city of Chicago used in interstate calls, and connects with the property owned by the American Company at the city limits. In the method used by the Illinois Company in separating its interstate and intrastate business, for the purpose of the computations which were submitted to the court, what is called exchange property, that is, the property used at the subscriber's station, and from that station to the toll switchboard, or to the toll trunk lines, was attributed entirely to the intrastate service. This method was adopted as a matter of convenience, in view of the practical difficulty of dividing the property between the interstate and intrastate services. The appellants insist that this method is erroneous, and they point to the indisputable fact that the subscriber's station and the other facilities of the Illinois Company which are used in connecting with the long-distance toll board, are employed in the interstate transmission and reception of messages. While the difficulty of making an exact apportionment of the property is apparent, and extreme nicety is not required, only reasonable measures being essential (citing cases), it is quite another matter to ignore altogether the actual uses to which the property is put. It is obvious that, unless an apportionment is made, the intrastate service to which the exchange property is allocated will bear an undue burden—to what extent is a matter of controversy. We think that this subject requires further consideration, to the end that by

13 P.U.R. (N.S.)

some practical method the different uses of the property may be recognized and the return properly attributable to the intrastate service may be ascertained accordingly."

It is evident from the foregoing that the court rejected the board-to-board method of separation and indicated that the station-to-station method should be employed, but said nothing as to the effect to be given to the rate structure.

The district court undertook to apportion the property in accordance with the Supreme Court's instructions. *Illinois Bell Teleph. Co. v. Gilbert*, 3 F. Supp. 595, P.U.R.1933E, 301. Precisely what the court did in that regard is not apparent from either its findings or opinion. However, we have been furnished with the briefs in the *Lindheimer Case*, *supra* (which was the appeal to the Supreme Court from the *Gilbert Case*, *supra*), and they disclose that the statutory court followed the method urged by the company here. This is also indicated by the opinion, which reveals that the appellants (city and state) claimed that the lower court had improperly assigned certain revenues to the interstate instead of the intrastate business. The Supreme Court, however, did not pass on the question, and as far as that case is concerned, there is only the authority of the statutory court for the company's position.

We have been referred to no testimony in the record, and have found none, contradicting the evidence of the company's witnesses relative to their theory of the rate structure. Mr. Lester presented and explained his Exhibit 142, which is his development of the separation of exchange and toll



## PACIFIC TELEPHONE & TELEGRAPH CO. v. THOMAS

revenues and expenses, but he did not testify specifically regarding the rate structure. Whether the testimony of the company's witnesses, even though uncontradicted, is binding on us, we need not determine. There are other considerations which should control our decision.

Counsel for the Commission say in their brief, "All that is necessary is that the method be a practical one calculated to give a fair result" (p. 260). And further, "Toll rates should be such as to pay plaintiff a reasonable return upon the value of its toll property, as augmented by this addition of exchange property." (p. 258.)

We concur in these views, but are of the opinion that, whatever the Commissioner's purposes may have been, he certainly did not adopt a method that was fair, nor one calculated to allow plaintiff a reasonable return upon any of its property.

To put the matter in a strong light, if it were granted that the Commissioner was wholly right in his findings of fair value, revenues, and expenses, the rate of return in 1933 for local business under present rates would be 7.34 per cent; for toll -1.34 per cent, or a total rate of return for the entire intrastate business of 5.8 per cent. Under the prescribed rates, the results would be: For local business, 5.27 per cent; for toll -2.23 per cent; for the entire intrastate property, 3.50 per cent. Thus, based on 1933 earnings, in view of our finding that the company is entitled to earn 6 per cent (see *infra*), the prescribed rates are confiscatory on the face of the order, but, even to achieve a rate as high as 5.27 per cent, it was necessary to increase exchange revenue by transferring a

portion of exchange expense to the toll business which already, under the undisputed evidence, was operating at a loss. In the year 1933 the toll properties, separated on a board-to-board basis, sustained a net loss of \$37,301; separated on a station-to-station basis they sustained a net loss of \$23,572 (Exhibit A-179, Tr. A-20).

Through the application of the method employed by the Commissioner, the extent of such loss has been materially increased, and the toll rates have been left unchanged.

The company vigorously maintains that it is entitled to earn a fair rate of return on its entire business in the state; that, even though the exchange rates were sufficient to yield a reasonable return on the value of exchange property, yet, if the return from toll business and exchange business taken together were insufficient to yield a fair return on the value of all intrastate property, the result would be confiscation.

It therefore contends that a rate investigation should bring within its scope the entire property within the jurisdiction of the regulatory body to the end that the rates fixed should be compensatory on all the business, such adjustments being made as between the various branches of the service and different localities as the equities or necessities of the situation might demand. (Baird, "Telephone Rate Making," Chap. V.) Apart from the constitutional question, there is much to be said for this view, from the standpoint of fairness to the utility, its patrons, investors, and public convenience and economy. Certainly, in Oregon, the former practice of granting to municipalities the power to reg-

## OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

ulate service and charges is now outmoded. We have lost our "unfounded belief in the political isolation and self-sufficiency of cities." (Baird, "Telephone Rate Making," p. 106.)

As a matter of due process, however, that broad issue need not be decided, since the exchange rates prescribed are clearly confiscatory quite apart from any consideration of the company's intrastate business as a whole.

The point here is, that the Commissioner has through the medium of a separate valuation of exchange property and separate determination of exchange rates *juggled* revenues and expenses as between the two branches of the telephone company's business, in such a way as to decrease the expense and increase the revenue of exchange, and increase the expense and decrease the revenue of toll; and at the same time he has permitted the toll rates to remain as they were, despite the fact that they were already inadequate even to pay the expenses of operation of the toll business.

This is an exercise of arbitrary power at variance with "the rudiments of fair play" made necessary by the Fourteenth Amendment. *West Ohio Gas Co. v. Ohio Pub. Utilities Commission* (1935) 294 U. S. 79, 79 L. ed. 773, 776, 6 P.U.R.(N.S.) 459, 55 S. Ct. 324.

It is argued in the Commissioner's brief (p. 258):

"However, inasmuch as the toll department has been assigned certain properties upon which it is entitled to make profit but which do not actually belong to it, it should assume some further responsibility than merely paying the maintenance and operating ex-

penses in connection therewith. It should pay something over and above this actual expense for the use of the facilities provided."

The obvious fact of course is that all the properties belong to the plaintiff, and that for the purpose of fixing rates to be charged by the different classes of service a separation must be made based on use. By reason of the method of separation employed a certain amount of value has been taken out of the exchange rate base and transferred to the toll rate base. The toll patrons should no more be required to pay a profit on the use of the property so assigned than the American Telephone and Telegraph Company should be permitted to collect a profit on its contract with plaintiff. (See *infra*.) But the toll department is, as counsel say, entitled to earn a fair return on the value of all property assigned to it. The Commissioner, however, has simply made the condition of the toll department worse than he found it and abandoned it to its fate.

This is an obvious injustice. We are of the opinion that an equitable adjustment demands that the income from the exchange property assigned to toll should go with the expense of maintaining it. The company's contention in this regard is sustained.

### *Expenses*

#### *A. Current maintenance.*

[48] The total expense of station removals and changes in 1933 was \$367,992. Of this amount \$358,986 was found by the company's engineers to be allocable to joint use, and \$4,178 was wholly local. On a time use basis 97.771 per cent of the joint

use portion or \$348,364 was assigned to exchange, which with the wholly local portion added made a total exchange expense for station removals and changes of \$352,543 (Exhibit 126, p. 64).

The Commissioner assigned to exchange \$282,323 (Exhibit 142, p. 3), a difference of \$70,219. The theory on which his ruling was based is stated in the order as follows (p. 30 [8 P.U.R. (N.S.) at p. 85]): "The station removals and changes were made in accordance with the commercial expenses as the activities of the commercial department cause changes in stations and service." Commercial expenses include the following classes of costs (Exhibit 126, pp. 101 and 106):

(a) General Commercial Administration; (b) Advertising; (c) Sales Expense; (d) Connecting Company Relations; (e) Local Commercial Operations; (f) Public Telephone Commissions; (g) Directory Expense; (h) Other Commercial Expense.

It is the company's theory that in a separation study based on time use, the allocation factor developed for the separation of the value of the stations should be applied to the expense of removing and changing them. To the court that seems to be a reasonable treatment of the matter, since the expense so incurred is intimately related to the use of the property. After a careful examination of the items which go to make up commercial expenses, we are wholly unable to see what they have to do with station removals and changes. The only defense of the Commissioner's ruling to be found in the defendant's brief is a statement that "such portion of expenses is not only fair and just upon

its face, but supported as it is by competent engineering evidence, the Commissioner's position in the matter is conclusive." (p. 262.) We have not been referred to the place in the record where such evidence is to be found and the unsupported statement of counsel that the separation is fair and just on its face is not very convincing. In our opinion the Commissioner's finding has no adequate foundation in the evidence and the company is entitled to prevail on this issue.

#### *B. Taxes.*

The company in its separation study assigned \$757,254 of taxes to exchange (Exhibit 126, p. 9). The Commissioner assigned \$717,293, a difference of \$39,960 (Exhibit 142, p. 1). The company has convincingly shown that the Commissioner's action was the result of the use of his separation factor of 65.47 per cent for exchange instead of 66 per cent, the correct percentage as found by the court, and of a mathematical error in applying that factor. The error is demonstrated in plaintiff's brief (p. 244). The only answer the defendant makes is that "the Commissioner merely allocated to the toll services taxes on the property which itself had been allocated to that service (p. 202)." The court finds for the company on this issue.

The company calls attention in its brief to two errors made by the Commissioner in plaintiff's favor: One, in overstating the charges to exchange expense for depreciation in the sum of \$836; the other in overstating exchange operating expenses for general services and licenses in the sum of \$1,134. Inasmuch as we are not al-

# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

lowing anything for general services and licenses (which was discussed under the heading American Telephone and Telegraph Company contract), the latter item may be disregarded. The item of \$836 will be deducted from the plaintiff's exchange expenses.

## Summary of Revenues and Expenses

As stated above, the company's claimed net revenue from its exchange business for 1933 was \$558,061. To this amount must be added the allocable portion of the deductions from charges for operating expenses made by the Commissioner, which we have approved. These charges relate to the company's entire business in the state. The portion thereof properly allocable to the exchange business has been ascertained by employing the factors for separation of expenses used by the plaintiff (Exhibit 126, p. 9). The exchange portion of depreciation expense deducted by the Commissioner is \$99,801. The exchange portion of expense of general services and licenses (American Telephone and Telegraph Company contract) is \$74,857. These sums, together with \$836, the amount of depreciation expense erroneously assigned to interexchange, make a total of \$733,555.

We find the plaintiff's revenues and expenses from its local exchange operations for the year 1933 to be as follows:

Revenues .....	\$4,902,341
Expenses .....	4,168,786
Balance net revenue .....	\$733,555

On the rate base of \$20,790,000 found by the court, the plaintiff's rate of return for the year 1933 was 3.5 per cent. The estimated reduction in

13 P.U.R.(N.S.)

the balance net revenue on the station-to-station basis effected by the rates in suit, according to the only evidence in the record, is \$314,177 (Tr. A, p. 26, Ex. A-179, p. 4), which is equal to slightly more than 1½ per cent on the fair value of the exchange property. The rate of return under the prescribed rates is approximately 2 per cent.

## Rate of Return

The applicable standard for determining whether a rate of return is sufficient to avoid confiscation under the Constitution is set forth in *Bluefield Water Works & Improv. Co. v. West Virginia Pub. Service Commission*, 262 U. S. 679, 67 L. ed. 1176, P.U.R.1923D, 11, 20, 43 S. Ct. 675:

"What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise

the money necessary for the proper discharge of its public duties."

In *United R. & Electric Co. v. West*, 280 U. S. 234, 74 L. ed. 390, P.U.R.1930A, 225, 50 S. Ct. 123, it was said that a rule cannot be laid down which would apply uniformly to all sorts of utilities, and "what may be a fair return for one may be inadequate for another, depending upon circumstances, locality, and risk"; and in *Smith v. Illinois Bell Teleph. Co.* *supra*, the court, while not expressing an opinion as to a fair rate of return in that case, indicated that the telephone company's position as a member of a large system organized for the purpose of maintaining the credit of the constituent companies and securing their efficient and economical management, was a factor to be weighed along with the utility's financial history.

It is reasonable to conclude that the plaintiff is in a more favorable financial condition than if it were a disconnected enterprise, and because it enjoys a practical monopoly in the field where its services are rendered. *Wabash Valley Electric Co. v. Young*, 287 U. S. 488, 501, 77 L. ed. 447, P.U.R.1933A, 433, 53 S. Ct. 234.

[49] General business conditions must be given due weight. A utility is not entitled to escape its share of the common loss in time of depression, nor to earn as large a profit as during a period of general prosperity. *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission* (1934) 292 U. S. 290, 78 L. ed. 1267, 1281, 3 P.U.R. (N.S.) 279, 54 S. Ct. 647 (where 6½ per cent was held adequate in view of depressed business conditions); *Los Angeles Gas & E. Corp. v. California*

*R. Commission*, 289 U. S. 287, 77 L. ed. 1180, 1200, P.U.R.1933C, 229, 53 S. Ct. 637 (where 7 per cent was held not confiscatory). In *Illinois Bell Teleph. Co. v. Gilbert*, *supra*, at p. 317 of P.U.R.1933E, the statutory court, in fixing rates of return of 6½ per cent for 1931 and 5½ per cent for 1932, said:

"We have given weight to the facts of which the court takes judicial notice relative to the general decline in corporate earnings during the years 1931 and 1932."

In 1903, in a water rate case, 6 per cent was held an adequate rate of return. *San Diego Land & Town Co. v. Jasper*, 189 U. S. 439, 47 L. ed. 892, 23 S. Ct. 571.

We have ruled adversely to the Commissioner's contention that value should be eliminated from the company's rate base because of supposed "excess plant" brought about by decline in business. We thought that that contention rested upon a faulty premise. It is with reference to the determination of a fair and just rate of return that the court should consider the existing economic situation. In doing so, we remember that the rates were to become effective November 1, 1934, and to operate in the future. We judicially know that since then the process of recovery from the depression has set in and gone steadily forward. We also know from the record of this case that the business of the plaintiff for the first six months of 1934 (the last period concerning which there is any evidence) showed a slight gain over the first six months of 1933. A rate of return adequate for 1933 might well be confiscatory for later years.



# OREGON CIRCUIT COURT, COUNTY OF MULTNOMAH

[50] Giving due consideration to all the relevant facts and bearing in mind that "the court in the discharge of its constitutional duty on the issue of confiscation must determine the amount to the best of its ability, in the exercise of a fair, enlightened, and 'independent judgment as to both law and facts'" (United R. & Electric Co. v. West, *supra*), we have concluded that 6 per cent on the fair value of its property is the rate of return necessary to be earned by the plaintiff in order to avoid confiscation.

We have examined the cases cited by plaintiff in which higher rates were approved. Without discussing them in detail, it is sufficient to say that they are marked by differences either with reference to prevailing economic conditions, or other factors which justify us in not following them. Neither are we bound by the opinion evidence on this subject offered by the plaintiff. (See authorities cited *supra*.) We have given it consideration, but think it should not control our decision in view of other pertinent facts to which we have called attention.

Since the income available for return under the prescribed rates would be materially less than 6 per cent on the fair value of the plaintiff's property, the rates are confiscatory, and the order fixing them must be enjoined as contrary to the due process clause of the Fourteenth Amendment. The interlocutory injunction heretofore issued will be made permanent.

It is to be borne in mind that our decision speaks as of November 1, 1934, the effective date of the order. The court can do no more than make an "honest and intelligent forecast" of the probable effect of the prescribed

rates based upon the evidence of the value of the company's property and its earnings during a period immediately preceding that date. *Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commission*, 262 U. S. 276, 67 L. ed. 981, P.U.R.1923C, 193, 43 S. Ct. 544, 31 A.L.R. 807. With the change in the economic situation which the country has witnessed since 1933, it is likely that the plaintiff's financial position has bettered itself,— to what extent we cannot say. We have given this element due consideration, but the margin between what we deem a reasonable rate of return and the rate which the company would enjoy if the order should be enforced, is too wide to permit us to indulge the assumption, unsupported by evidence, that it has been wiped out by returning prosperity.

## Future Depreciation Charges

Section 61-217, Oregon Code 1930, directs the Commissioner to "ascertain and determine what are the proper and adequate rates of depreciation of the several classes of property" of every utility, and requires the utility to "conform its depreciation accounts to such rates so ascertained and determined by the Commissioner." In pursuance of this authority the Commissioner fixed a composite annual depreciation percentage rate of 3.995 per cent applicable to the plaintiff's depreciable telephone plant. (Order p. 81 [8 P.U.R.(N.S.) at p. 84]).

[51] It is the company's position that the state's power of regulation in this respect has been superseded by the Transportation Act of February 29, 1920, amending § 20 (5) of the Interstate Commerce Act, which di-

rects the Interstate Commerce Commission to prescribe the percentages of depreciation to be charged by telephone companies. It is enough to say that the precise question was raised in the Supreme Court in the case of *Northwestern Bell Teleph. Co. v. Nebraska State R. Commission* (1936) — U. S. —, 80 L. ed. 1, 13 P.U.R. (N.S.) —, 56 S. Ct. 536, and decided adversely to the company's contention since this case was submitted. The ground of the ruling is that the Interstate Commerce Commission has never exercised the power.

[52] The company also contends, as we have said, that the allowance made by the Commissioner is inadequate. In our discussion under the heading "Annual Allowance for Depreciation" we held that an allowance for the year 1933 based upon a percentage rate of 3.995 was reasonable, and for the reasons there stated we are of a like opinion as to the rate to be charged by the company in the future.

[53, 54] Even though we thought otherwise, it would be our duty to refuse to enjoin the enforcement of the order in this particular. While the statute, § 62-136 Oregon Code 1930, confers jurisdiction on the court to review this order and to vacate it on the ground that it is unlawful, we are of the opinion, since the Commissioner has the power to act, that our jurisdiction is limited to ascertaining whether there is substantial evidence to support his ruling, because it is purely legislative in character and presents no issue of confiscation. Moreover, there is no showing of threatened irreparable injury which justifies the company in invoking the

extraordinary remedy of injunction. *Kansas State Corp. Commission v. Wichita Gas Co.* (1934) 290 U. S. 561, 569, 78 L. ed. 500, 1 P.U.R. (N.S.) 433, 54 S. Ct. 321; *Northwestern Bell Teleph. Co. v. State R. Commission* (1935) 128 Neb. 447, 8 P.U.R. (N.S.) 46, 259 N. W. 362, 364.

[55] The reports of the Commissions and the decisions of the courts in rate cases are replete with instances of excessive charges for depreciation expense made by public utilities, to the injury of the public. As we have seen, and as both the parties to this controversy agree, the law does not permit the recapture of such charges in a depreciation reserve, nor the use of them to support confiscatory rates. The state has it within its power, however, to prevent future abuses of this kind by fixing the rate at which depreciation expense may be charged. In this case the evidence, as we have heretofore pointed out, amply sustains the Commissioner's contention that the company has, over a period of years, received money from the ratepayers for depreciation expense which has been used, not for the purpose for which it was collected, but for capital expenditures. We think that the Commissioner was clearly right in putting an end to this practice through the exercise of the authority vested in him by the statute.

Findings and a decree will be entered conformable to the foregoing opinion. Counsel for the plaintiff will prepare the same and present them to the court within five days. The defendant will be allowed ten days thereafter in which to file his objections. No costs will be assessed.

Citizens of Town of Kentfield  
v.  
Pacific Gas & Electric Company

(Decision No. 28566, Case No. 4048.)

*Discrimination, § 32 — Rates — Localities.*

1. Unincorporated communities served by a public utility company and embracing simultaneously lighting, fire, and school districts are entitled to a parity of consideration and treatment in the matter of rates, p. 402.

*Rates, § 203 — Unit for rate making — Gas and electric service — Separate communities.*

2. To fix and maintain separate individual rates for each community would obviously be impossible in the case of a gas and electric utility which renders service to the residents of a total of 724 incorporated cities and towns and unincorporated communities, but the nearest practical approach to individual rates for cities, towns, and communities lies in the adoption of groupings wherein the rates fixed are based upon the average conditions pertaining to the group, p. 403.

*Discrimination, § 32 — Rates — Localities — Groups.*

3. Rates for groups of communities served by a gas and electric utility which serves a large number of incorporated cities and towns and unincorporated communities being properly based upon averages, it is inescapable that comparisons between two individual communities of different groups, or even of the same group, will indicate occasionally close similarity or wide variation, but a comparison of the groups as a whole will show that each possesses quite a different and distinct picture than is presented by either of the other groups, p. 403.

*Discrimination, § 37 — Rates — Localities — Incorporated and unincorporated communities.*

4. The incorporated limits of cities and towns form a rather definite dividing line between areas of low cost and high cost service, which justifies a differential in gas and electric rates between such areas, p. 404.

[February 10, 1936.]

**C**OMPLAINT against discrimination between localities by a gas and electric utility; complaint dismissed.

APPEARANCES: August H. Pape, complainants; C. P. Cutten and R. W. DuVal, Attorneys, for Pacific Gas and Electric Company.

# CITIZENS OF TOWN OF KENTFIELD v. PACIFIC GAS & ELEC. CO.

WARE, Commissioner: This is a complaint signed by twenty-nine residents of the unincorporated community of Kentfield, Marin county, California, who are consumers of gas and electric service supplied by the Pacific Gas and Electric Company in said community. The complaint alleges that the rates for said service charged by said utility in Kentfield are in excess of those charged in the neighboring incorporated towns of Ross, Larkspur, and San Anselmo, of the sixth class, and that said rates are unreasonable and discriminatory by reason of such excess.

Complainants ask that the rates now being charged for said service by Pacific Gas and Electric Company, in Kentfield, be reduced to conform exactly with the rates for said service charged by said utility in the three incorporated towns above mentioned.

A public hearing on this complaint was held in Kentfield on December 10, 1935; thereafter briefs were filed by complainants and the defendant, and the case is now ready for opinion and order.

At said hearing, August H. Pape, witness for complainants, testified that the unincorporated community of Kentfield includes the following described area: "Beginning at the most southeasterly extremity of the limits of the incorporated town of Ross, being its intersection with the southerly line of the Raymond tract, thence running northeasterly irregularly along the easterly limits of said town to their point of intersection with the southerly limits of the incorporated town of San Rafael; thence easterly along the limits of said town to the point of intersection of same with the

southwesterly boundary of the P. W. Riordan tract; thence southerly along the westerly limits of the P. W. Riordan tract to the limits of the incorporated town of Larkspur; thence southwesterly along the limits of said town to a point 400 feet southwest of the center of the county road; thence northwesterly parallel to and at a distance of 400 feet southwesterly from the county road to the southerly line of the Raymond tract; thence westerly along said line to its intersection with the limits of the incorporated town of Ross, the point of beginning, all in the Ross Landing school district, county of Marin"; that all of said area is included in the Kentfield lighting district and Kentfield fire protection district and that all of said area except that portion of same known as the Del Mesa tract is included in the Ross Landing elementary school district; that Kentfield is fully as densely built up as the aforementioned adjoining incorporated towns of Ross and Larkspur, and that, in his opinion, the cost of installation of gas mains and electric distribution lines and the cost of rendering gas and electric service is no greater in Kentfield than in Ross or Larkspur.

Counsel for complainants introduced into evidence a copy of Senate Bill No. 1094, introduced at the last session of the legislature. A. C. Olney, president of the Marin Junior College, located in Kentfield, testified that approximately 360 regular students and 200 part-time students attend said college, and that approximately 75 to 100 of these students reside in Kentfield for either five or seven days each week.

B. B. Beckett, rate engineer of Pa-

## CALIFORNIA RAILROAD COMMISSION

cific Gas and Electric Company, witness for defendant, testified that the present arrangement and grouping of schedules covering domestic and commercial electric service on the system of defendant utility was first ordered in effect by the Commission in its Decision No. 11457, decided December 30, 1922, 22 Cal. R. C. R. 744, P.U.R. 1923C, 385; that said decision classed the general lighting rates into three general categories, namely, group one, including the congested metropolitan area of the bay district; group two, including the incorporated cities and towns other than those included in group one; group three, including the unincorporated territory outside of all incorporated cities and towns.

He stated that generally speaking, the cost of distribution of gas and electricity varies directly with the distance between consumer so that said cost of distribution is lower in congested areas, such as incorporated cities and towns, and higher in rural and unincorporated communities; and that the number of consumers and revenue per mile of gas main or distribution line is generally greater in incorporated areas than in unincorporated areas.

This witness further testified that defendant serves electricity to the residents of 134 incorporated cities and towns and 435 unincorporated communities on its system and that it serves gas to the residents of 92 incorporated cities and towns and 63 unincorporated communities; that the number of electric consumers per mile of distribution line in Kentfield in 1934 was 38.5 as compared with 68.1 for all incorporated cities and towns of group two mentioned above and

that the annual revenue per mile of line in Kentfield for the year 1934 was \$2,209 as compared with \$4,430 for the incorporated cities and towns of said group two; that the number of gas consumers per mile of distribution main in Kentfield in 1934 was 45.6 as compared with 62.9 for all incorporated cities in the North Bay divisions, with respective revenues per mile of main of \$1,940 in Kentfield and \$2,625 for the incorporated cities.

Witness for defendant finally testified that there now exists on defendant's system approximately seventy-one unincorporated communities, which, like Kentfield, are included within the boundaries of three districts, namely, lighting, fire, and school districts. If all of these seventy-one communities were given the rates for gas and electric service applicable to the incorporated cities of group two, there would result therefrom a reduction of approximately \$125,000 per year in revenues. If the rates for gas and electric service applicable to the incorporated cities of group two were made applicable in all of the unincorporated communities on defendant's system, there would result therefrom a reduction in annual revenue amounting to approximately \$1,500,000.

[1] It is self-evident that all of the 71 communities now served by the company, and embracing simultaneously lighting, fire and school districts, are entitled to a parity of consideration and treatment. The far-reaching effect, measured in terms of reductions of annual revenues of the Pacific Gas and Electric Company throughout the remaining rural district, which would inevitably follow the granting



CITIZENS OF TOWN OF KENTFIELD v. PACIFIC GAS & ELEC. CO.

of the relief sought herein, presents a very wide field for conjecture; but it is reasonable to conclude that said utility would experience a reduction in annual revenues amounting to a considerable portion of the \$1,500,000 last specified. This record fails to justify any order which will disturb or disorganize the three existing groups above mentioned.

[2, 3] The service of gas and electricity in California in general, and on the system of this utility in particular, is widespread. As set forth in the record of this proceeding, service is rendered by this utility to the residents of a total of 724 incorporated cities and towns and unincorporated communities. To fix and maintain separate individual rates for each of these communities would obviously be impossible. Experience has shown that the nearest practical approach to individual rates for cities, towns, and communities in the adoption of groupings wherein the rates fixed are based upon the average conditions pertaining to the group. Inasmuch as such rates are based upon averages and properly so, it is inescapable that comparisons between two individual communities of different groups, or even of the same group, will indicate occasionally close similarity or wide variation. However, a comparison of the groups as a whole will show that each possesses quite a different and distinct picture than is presented by either of the other groups.

When the present arrangement of the three general groupings of electric, domestic, and commercial consumers on defendant's system was adopted in the above-mentioned Decision No. 11457, the Commission said (22 Cal.

R. C. R. at pp. 783-785, P.U.R. 1923C, at pp. 437-440):

"There are on file with the Commission at the present time, and effective on applicant's system, 58 different rate schedules, in addition to special contracts including those for street railway service, street lighting service and other special service not covered by the regular schedules. . . .

"It was the consensus of opinion of all parties represented that the schedules should be simplified and reduced in number is so far as possible and still maintain flexibility. . . .

"An adjustment of rates to apportion more equitably the charges between groups of consumers and classes of service in connection with reduction of rates is advisable. . . .

"The fixing of rates and the equitable division of charges on a system as extensive as that of applicant is a problem in the solution of which no exact rule or formula can be used. The approximate cost of rendering the several classes of service; the economic value of the service to the individuals and groups of consumers; the rates heretofore in effect and their results upon the operations of the consumers; the elimination of discriminatory conditions amongst classes and districts and the general effect on future development of business of new rates must be considered in the division among the various classes and groups of consumers of the total revenue which the company is entitled to receive. Forms of rates must be relatively simple, yet must meet the widely varying conditions of retail and wholesale service. It is impossible and uneconomical to attempt to fix rates such that each district or each class of

## CALIFORNIA RAILROAD COMMISSION

consumer will return to the company an equal rate of compensation for the average proportion of the plant necessary for their service. The system is so extensive and receives power from so many points that the service to the different classes of consumers is largely interdependent as to cost. . . .

"Evidence in this proceeding indicates, as has been many times stated, that the profit or return upon capital invested in the congested incorporated territories is greater than in the developing rural territories served. If this is not to be continued, the extension and development of the rural and unincorporated territory will be stifled and such policy must ultimately work to the detriment of the more congested districts. In the rates fixed herein, consideration is given both to the justification on the one hand, for a lower lighting rate in the incorporated territory than in the unincorporated territory, and also to the justification and fairness of fixing a reduced rate for power sold for redistribution in unincorporated territory still in the development stage. . . .

"Three general lighting rates are fixed herein for the entire system, one for the congested metropolitan area of the bay district, one for other municipalities and incorporated territory on the system, and one for rural territory."

Upon the introduction and widespread distribution of natural gas on the system of defendant, the same policy and reasons prompted the fixation of rates for gas service on a basis similar to the electric, but with a larger number of groupings wherein the service charge or minimum charge is somewhat lower in incorporated areas than in unincorporated areas.

[4] There is no question but that, taken as a whole, the density of consumers and revenue per mile of line is greater, and the cost of installation and operation per consumer is less in incorporated cities and towns than in unincorporated areas, for both gas and electric service. It is equally true that the incorporated limits of cities and towns form a rather definite dividing line between areas of low-cost and high-cost service, which justifies a differential in rates between said areas.

Complainants have an obvious and natural way of procuring for the area of Kentfield, involved herein, the rates applicable to incorporated areas through the simple process of municipal incorporation. Until these complainants desire and effectuate such incorporation, it is both obvious and fair that they shall continue under the advantages and handicaps characteristic of rural districts.

# The March of Events

## Reopens Investigation

THE Federal Communications Commission's hearings in its \$750,000 investigation of the American Telephone and Telegraph Company reopened on June 2nd, with Samuel Becker, special FCC counsel, questioning E. S. Wilson, A. T. & T. vice president, about numerous "public relations" activities. Becker asserted that the A. T. & T. had attempted to forge public opinion into an instrument for effecting rate increases.

Mr. Wilson testified that the American Telephone and Telegraph Company had launched intensive campaigns designed to build up good will prior to seeking rate increases from state regulatory bodies. These operations, he testified, included newspaper advertising, talks to civic organizations, interviews with subscribers, posters and circulars distributed among employees and the general public. Wilson said prepared stories, interviews, and editorials were submitted to newspapers "to give the editors the facts."

Mr. Becker asserted that favorable public sentiment to the company created by these practices was designed to banish apprehension by regulatory bodies that public condemnation would follow the granting of rate increases.

## Sees Power as Political Issue

IN a 36-page pamphlet issued recently by the National Popular Government League, it was charged that the public utility corporations, especially the holding companies, are quietly at work in an effort to control the nomination and election of candidates for the presidency and the Congress. The pamphlet, compiled by Judson King, national director of the league, purports to give the utility records of all the leading candidates for the presidential nominations.

The power question was declared to be a paramount issue before the country and the statement carried the signed endorsement of twenty-eight Senators and eighty-two members of the House of Representatives, the signers for the most part being the progressives of both parties.

According to the conclusions of the document, which was termed a "non-partisan analysis for the information of voters" by the league, it would appear that President Roosevelt and Senator Borah are the only candidates friendly to strict Federal regulation and, in important instances, public ownership of utilities.

The presidential candidates named were as follows: President Roosevelt, Governor Tammidge of Georgia, and Colonel Henry Breck-

inridge, Democrats; Governor Landon, Senators Borah, Vandenberg, and Dickinson, Colonel Knox, Robert A. Taft of Ohio, and former President Hoover, Republicans.

## Majority Favors Public Ownership

THE power division of the Public Works Administration recently reported to Administrator Harold L. Ickes that the actual election results from 132 communities in 32 states and the territory of Alaska revealed that 82 per cent or 112 communities favored publicly owned electric power plants.

The balloting summarized consisted of regular local elections either on local policy proposals or bond propositions under which voters decided to assess themselves to get the benefits of a PWA power project. This survey, the power division stated, covered only those communities which submitted applications to the PWA for loans and grants. It was further limited to those communities where the generating plant or general distribution system was not publicly owned at the time of the election.

## Begins Nation-wide Survey

A NATION-WIDE survey to determine how best to rearrange the utility industry under the Holding Company Act was begun early last month by the Securities and Exchange Commission. The constitutionality of the act is now being attacked in the courts, but officials believe that whatever the result of this test, the utility companies are preparing for a gigantic rearrangement of control, regardless of government supervision. The act provides for the "integration" of the industry, beginning in 1938.

Three engineers are reported to be inspecting the New England field, regarded as an especially well integrated section, and eight different groups of experts in the commission were said to be studying particular groups of companies.

## Opens Telephone Service

TELEPHONE service with El Salvador, Central America, was opened June 10th with an exchange of greetings between Secretary of State Cordell Hull at Washington and Dr. Miguel A. Araujo, Minister of Foreign Relations for El Salvador at San Salvador. Others who took part in the inaugural conversations included Don Hector D. Castro, Sal-

vadoran Minister to the United States, at Washington, and Frank P. Corrigan, American Minister to El Salvador.

With the extension to El Salvador, service from Bell and Bell-connecting telephones is now available to all of the Central American Republics.

El Salvador is the most densely populated country in the western hemisphere, with a population estimated at 1,670,000 in an area of 125 square miles.

The cost of a 3-minute conversation between New York and San Salvador is \$12, with \$4 for each additional minute. Connection is established over a short wave radio telephone circuit between American Telephone and Telegraph Company stations at Miami, Fla., and a Salvadoran radio-telephone station located at San Salvador.

### Urges Cheaper Power

REPRESENTATIVE John E. Rankin (D.), of Tupelo, Miss., said in the House last month that an overcapitalization of more than \$7,000,000,000 existed in public utility financing in this country for which consumers were overcharged more than \$1,000,000,000 annually. Prior to the creation of the Tennessee Valley Authority, he said, a private utility in the area purchased power from Muscle Shoals for two mills a kilowatt hour which, he alleged, it sold for 10 cents a kilowatt hour. The TVA, he said, is purchasing the same unit of power for three mills and selling it for six mills. He asserted power rates could be made even cheaper than the TVA scale, quoting from a 1930 Army Engineers' report to the effect that power could be generated at Muscle Shoals and transmitted 100 miles for less than two mills a kilowatt hour, or less, he said, than one third what Tupelo and other TVA cities now pay.

### Utility Accounting Simplified

As the first step in the development of uniformity in accounting in a field where quite diverse practices have prevailed, the Securities and Exchange Commission made public on June 3rd a uniform system of accounts for mutual service companies and subsidiary companies of holding company systems registered under the Public Utility Act of 1935 and effective on August 1st.

Although designed primarily for companies required under the act to 'service' their associate companies at cost, the system provides for the accounting of profits on transactions with nonassociate companies to the extent permitted by the commission's rules. The system is not applicable to companies which are primarily operating companies or which merely perform incidental services for other companies.

### Plans World Communication System

A PLAN designed to insure an American-controlled system of world communications was reported last month to be in the process of development by officials of the Federal Communications Commission. It will be submitted to the State, War, and Navy Departments for approval.

The program would provide for, and require, development of an economic basis of telephone, cable, and radio-telegraph circuits direct from the United States to various points in Europe, Africa, and the rest of the world. One of the principal immediate objectives, an official explained, was the elimination, as far as possible, of the present system of routing many communications through London, thus giving to the British a measure of control over telephone and cable circuits.

## Alabama

### Rate Held High

W. M. BRUNSON, state's public attorney, was recently reported to be prepared to file with the Alabama Water Service Company a "suggested" electric rate which he said would save consumers in 18 central and south Alabama towns approximately \$60,000 a year. Brunson said the suggested schedules for domestic and commercial consumers had been approved by authorities of the 18 municipalities involved, and that they would be submitted to the company.

Mr. Brunson stated that "present electric rates charged by the company are unreasonable," and that if the company did not adopt the suggested schedule, he would file a bill with the Alabama Public Service Commission to require the company to put the new rates into effect.

### Rate Dispute Continues

ATTORNEY General A. A. Carmichael, who some time ago refused to defend a telephone rate reduction order of the Alabama Public Service Commission, in an open letter recently said, "I wonder why Associate Commissioner Fitzhugh Lee does not mandamus me in court if he is sincere in his claim I am neglecting my duty."

Lee said it was Carmichael's statutory duty to defend the commission's \$250,000 reduction order against Southern Bell Telephone Company, but the attorney general reiterated his charge that the reduction was "inadequate" and he did not expect to defend it.

Carmichael and Horace Wilkinson, representing the city of Birmingham, have appealed the reduction order to Montgomery circuit court on grounds of "inadequacy."



# From Cross-Roads Village To Giant Cities

## TRUSCON PRODUCTS SERVE PUBLIC UTILITIES

Truscon's facilities for serving public utilities are considered to be the most extensive of any other manufacturer of

comparable products. Wherever a need arises for any one or more of these products, Truscon's nation-wide network of distributing outlets insures prompt co-operation.

Because of this wide scope of Truscon products and distributing facilities... you can concentrate a correspondingly wider scope of responsibilities in one dependable source of supply.

When engineering service is required, Truscon is organized to furnish expert assistance. When unusual needs demand variations from standard products, Truscon's manufacturing personnel and equipment can meet special requirements with speed and accuracy.

If you, personally, are directly or indirectly concerned with the correct selection and application of any one or all of the types of products listed at the left, turn to Truscon for the kind of co-operation that relieves you of many countless details.

### A PARTIAL LIST OF TRUSCON PRODUCTS

- Standard Steel Buildings**  
Roof Types... Pitched Roof Types... Structural Trusses... Complete Erection
- Steel Window Products**  
Every type of steel windows
- Steel Doors**  
Every type of steel doors
- Steel Joists**  
Standard... Special... Accessories
- Metal Lath Products**  
Metal Laths of all types... Corner Beads... Channels... Studs... Partitions... All Related Accessories
- Steel Roofs and Side Walls**  
Skeldeck Roofs... Ferroclad (Insulated) Walls... Special Types
- Reinforcing Steel**  
Rebar... Kahn Bars... Column Hooping... Steel Forms... Florextiles... Locktype... Inserts
- Steel Poles and Towers**  
Helius Steel Poles... Structural Steel Towers... Cross Arms... Fittings... Lighting Standards
- Reinforcing Steel Road and Bridge Products**  
Complete line of steel reinforcing products for concrete pavements, roads, bridge floors, etc.

# TRUSCON STEEL COMPANY

## YOUNGSTOWN, OHIO

"When writing Republic Steel Corporation (or Truscon Steel Company) for further information, please address Department PF."

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



## Arkansas

### Phone Rate Cut Held Up

**T**HE state department of public utilities issued an order on June 1st suspending a reduction in telephone rates ordered by the Batesville city council, pending completion of a statewide study of rates of the Southwestern Bell Telephone Company. The department required the company to post a bond of \$3,500 to protect subscribers against loss in the event the reduced rates finally are found to be justified.

The company contended that the proposed rates would cause the company to lose several thousand dollars a year on its Batesville exchange.

### Favor Gas Rate Reduction

**A**t a recent hearing on application of the Arkansas-Louisiana Gas Company and the Little Rock Gas and Fuel Company for authority to merge the latter company with the former, P. A. Lasley, chairman of the state utilities commission, said he believed the "gateway" price of natural gas sold by the

Arkansas-Louisiana Company to the Little Rock Company should be reduced from 39 cents to 29 cents per thousand cubic feet. He said the proposed reduction of 25 per cent could be divided, with half passed along to consumers with the Little Rock distributing company receiving the other half to enable it to offset alleged losses, which he said resulted from the excessive gateway price.

E. I. McKinley, Jr., city attorney of Little Rock, asked for additional time to study the merger proposal to determine if the city should intervene as a protection against possible difficulties in obtaining a reduction in rates, or in purchasing the distributing system at some future time.

J. C. Hamilton, an official of the Arkansas-Louisiana Company, said the proposed merger would enable the Arkansas-Louisiana Company to save in state and Federal income tax payments because the larger company could take credit for losses sustained by the local company. He said the merger plan was in keeping with the policy of Cities Service companies to consolidate smaller units wherever possible in order to effect savings in operating costs.

## California

### Dispels Rate Jump Fear

**B**y unanimous vote, the Los Angeles board of water and power commissioners on June 2nd adopted resolutions removing the threat of increased water rates. Dr. John R. Haynes said the board felt the rate increase was unnecessary in view of the assurances given that the city council will provide \$700,000

for city water services and that the metropolitan water district may legally pay to the department of water and power \$903,631 on account of its indebtedness to the department. Dr. Haynes was instructed to appoint a committee to request payment of the sum due from the metropolitan water district at that organization's next meeting. The planned increase was expected to bring in \$1,700,000.

## Illinois

### Opposes Seaway Treaty

**T**HE lower house of the state legislature by unanimous vote recently reaffirmed its opposition to the St. Lawrence seaway treaty and memorialized President Roosevelt and the Congress to refuse its ratification for the

reason that "it constitutes a gross injustice to the state."

The Illinois house described the treaty as "internationalizing Lake Michigan, a body of water entirely within the limits of the United States, and placing its control in an international joint commission."

## Indiana

### Seeks Validity of Lease

**S**UIT for an injunction and a declaratory judgment affirming validity of a 99-year lease of Indianapolis Gas Company property to Citizens Gas Company was filed in Federal

court at Indianapolis last month by Chase National Bank of New York as trustee for bondholders of Indianapolis Gas.

Last year the Indianapolis utilities district acquired properties of Citizens Gas, but refused to accept the lease made in 1913. By a

# HEAVY-DUTY STAMINA

## IN A HALF-TON TRUCK



International sizes range from 3-ton cylinder light-delivery chassis at \$415 f.o.b. factory to six-wheelers. The Model C-1, 113" wheelbase, with pick-up body and standard equipment

**\$545** f.o.b. factory

IN THE Half-Ton International Model C-1 are incorporated many of the features of truck design that provide the stamina for which the big heavy-duty Internationals have long been famous. The all-truck construction of this dependable truck provides not only unequaled economy but handling ease, power to spare, and speed-with-safety.

Put it up to this half-ton truck and you will do your hauling job with new efficiency—

and a new economy that will be a source of profit year after year. The Model C-1 comes in two wheelbase lengths—113 inches and 125 inches—making a great variety of body adaptations possible. The longer size is a special International feature in a half-ton truck.

For complete information on the International Model C-1 or any other size in the line, call the nearby Company-owned branch or International dealer.

**INTERNATIONAL HARVESTER COMPANY**  
(Incorporated)

606 So. Michigan Ave.

Chicago, Illinois

# INTERNATIONAL TRUCKS

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*

recent "standstill" agreement, the utilities district agreed to place lease rentals in escrow pending determination of validity of the lease. This agreement, according to the complaint, was made by officials of the Indianapolis Gas Company "without knowledge or consent of the bondholders" and deprives them of income from their bonds pending the settlement. They contend that the lease binds the city

as successor to the Citizens Gas Company.

The city has been operating the property, conceding the equity of a rental but claiming that while the 99-year lease was valid against the Citizens Gas Company, it is not enforceable against the utilities district for the reason that trustees of the Citizens Company had no legal authority to attempt to bind their trust for a longer period than its duration.

## Iowa

### REA Approves Loans

THE Rural Electrification Administration early last month announced a \$120,000 loan to the Adams County Coöperative Electric Company of Corning, to construct 110 miles of power lines to serve about 355 farms in Adams county. The REA said current would be purchased from the municipal plant at Corning.

The REA also approved the following loans for Iowa: Glidden municipal power plant, \$55,000 for 55 miles of power line to serve 160 families in Carroll county; Muscatine county rural electric coöperative, \$70,000 for 69 miles of line in Muscatine, Cedar, Louisa, and Johnson counties; Shelby county rural electric coöperative, \$67,500 for 63 miles of line in Shelby, Harrison, Cass, and Pottawattamie counties.

## Kansas

### Phone Agreement

THE agreement of the city of Topeka with the Southwestern Bell Telephone Company, increasing the city's revenue from the company to \$7,000 a year, was given final approval recently by the city commission.

The city ordinance gives the Southwestern Bell Telephone Company certain rights on the streets and alleys, as given other utilities, in return for which the telephone company

is to pay at the first of each year the sum of \$7,000.

The annual payment is to take the place of an annual license formerly charged the company, and free telephone service extended the city. The agreement was effective as of January 1, 1936, and for this year \$2,637 will be deducted by the company for this year's city phone bill. Beginning next year, the city will be billed monthly for phone service at regular rates.

## Kentucky

### Impounded Funds

THE state railroad commission recently extended until June 30th the time for the Lexington Gas Company to distribute impounded funds to consumers. The gas company, following prolonged litigation over rates, had been ordered to distribute funds impounded pending settlement of the case to consumers by June 1st. The order provided that funds not distributed by that date should be divided between the city and the gas company. It was understood about \$7,000 was undistributed.

A distribution of the annual savings in rates as to electric consumer classes was as follows: residential, \$204,652; small commercial lighting, \$199,705; large commercial light and power, \$76,489; commercial and industrial power, \$91,571, and municipal street lighting, \$31,400.

Gas rate reductions for residential, commercial, and industrial users were estimated at \$33,593.

In addition, rates for county consumers would be reduced according to the rate ratio prevailing between county and city, it was explained, provided the fiscal court approves. The city has no right to make a county rate. The county rates on electricity run from one-half cent to one cent higher per kilowatt of electricity than city rates for the average consumer.

The electric contract will run for two years. The gas franchise will run for a longer period. Measures embodying the proposed decreases were being drawn for introduction before the board of aldermen June 16th.

### Agree on Rate Cut

A GAS and electric rate agreement which was estimated to save consumers of Louisville \$637,410 a year was reached June 8th by Mayor Neville Miller and officials of the Louisville Gas and Electric Company.



No. 7

July 2, 1936

# Pennsylvania's Page

## Service



Pennsylvania's service to utilities is characterized by the strategic location of its district agencies. In every important centre you will find a Pennsylvania representative who is capable and fully qualified to help you solve your individual transformer problems. Or write us direct and we will see that you are accorded the fullest co-operation.



**Pennsylvania Transformer Company**  
1701 Island Avenue, **PITTSBURGH, PA.**

*This page is reserved under the MSA PLAN  
(Manufacturers Service Agreement)*

## Maine

### Hopes to Save Quoddy

**G**OVERNOR Louis J. Brann, who recently returned from a trip to Washington in the interests of Quoddy, stated that he still believed continued effort might save the vast tide-harnessing project. He said he was waiting until Congress adjourns, when he will resume his conversations with the President. Pending congressional adjournment, Governor Brann said he felt the President was too busy, but after having a talk with him he felt that

"continued effort may save the project."

The governor reiterated his belief that Senators Hale and White, both Republicans, were responsible for the adverse Senate vote which killed the Robinson resolution authorizing further study of the project. He said Senator Hale's demand for separate votes on Quoddy and the Florida ship canal was "the betraying kiss of death" to the tidal trap. He termed Senator White's speech in opposition to the Robinson resolution and against the Florida ship canal "the fatal stab of annihilation."

## Maryland

### Coöperative Asks Permit

**T**HE first coöperative public utility organization ever formed in Maryland petitioned the public service commission last month for permission to erect transmission lines and buy and sell power in Calvert county. Organized as the Consumers' Coöperative Company, the group plans to build more than 70 miles of

lines all over the county and, if necessary, erect its own generating plant for the purpose of serving several hundred farmers who are without electricity.

John B. Gray, Jr., one of the concern's attorneys, said the Rural Electrification Administration had promised to lend \$90,000 for the installation of the lines and may advance \$35,000 additional for the plant.

## Massachusetts

### Kills Sliding-scale Plan

**T**HE state senate on June 2nd, by a vote of 17 to 4, rejected the resolve for further study of the advisability of establishing a sliding-scale system of rate making for power and

light, despite the opposition of Senator Angier L. Goodwin of Melrose. Recommendation that the resolve be rejected was made by the legislative committee on power and light. As chairman of the committee, Senator Goodwin said the matter should be studied further.

## Michigan

### Tax Factor in Phone Rate Cut

**N**EW Federal taxes, it was revealed last month, would reduce by \$600,000 a year any cut which the Michigan Public Utilities Commission may make in the rates of the Michigan Bell Telephone Company.

The utilities commission has been working on a new Michigan Bell rate order for several months, and while no official information was

available at this writing, it was believed that the order would be promulgated before the end of June, and that it would reduce Michigan Bell revenues by \$1,500,000 to \$2,500,000 a year.

Commission Chairman William M. Smith made the statement that "assuming there will be a cut in rates, it will be \$600,000 less because of taxes passed by the present Congress."

## Mississippi

### Lose Tax Fight

**T**HE state of Mississippi on June 1st lost in the U. S. Supreme Court its claim for more than \$500,000 back taxes from the Memphis and Interstate Natural Gas companies, Delaware corporations, which operate pipe

lines from Louisiana fields across Mississippi.

The court refused to interfere with decisions February 14, 1936, by the fifth circuit court of appeals which ruled a Mississippi state law granting a 5-year exemption to "public utilities" applied to the two corporations.

James B. Gully, state tax collector, and

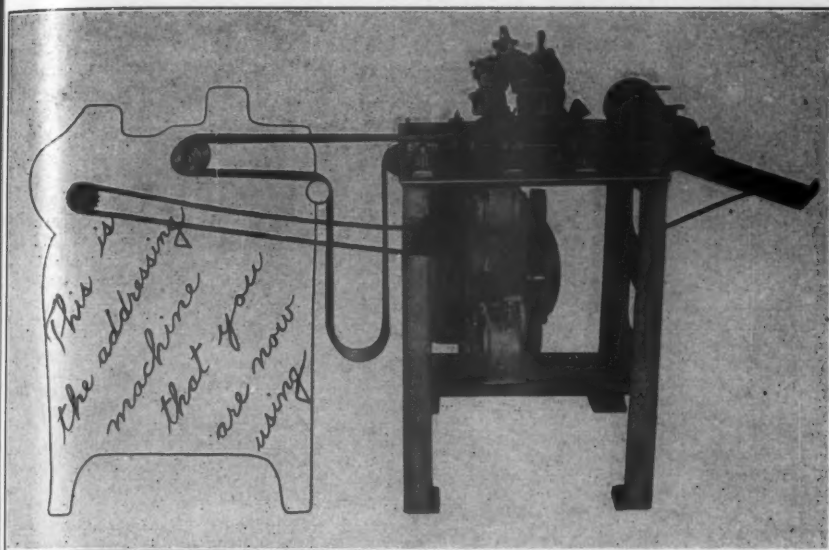
Instea  
ing s  
do it

This  
presen  
this p  
front  
With  
speed  
addre  
Here  
who  
Bill  
mach

TH  
Man

This





## Here's a Bill Printing Machine that can be used with ANY Addressing Machine

Instead of continually paying money for pre-printed bills, convert your *present* addressing system into a *combination* printing and addressing system. You can readily do it with the

### Elliott Bill Printing Machine

This machine will pull blank paper, from rolls, under the addressing head of your present addressing machine to receive the addresses. It will then continue feeding this paper through the printer (shown above at the right), where it is printed on the front and back, scored, dated and chopped off.

With the Elliott Bill Printing Machine you not only save on printing bills, but you speed up your addressing operation, as it is really an automatic feed through the addressing machine instead of a hand feed.

Here is something new, designed to bring the advantages of bill printing to those who do not desire to make extensive changes in their addressing system. The Elliott Bill Printing Machine can be used in conjunction with any model of any addressing machine now used for Utilities' billing and with any kind of an addressing medium.

Write NOW for details of this time and money saving combination. State what addressing machine you are now using, size of list, etc.

## THE ELLIOTT ADDRESSING MACHINE COMPANY

*Manufacturers of Hand and Electric Addressing Machines for Every Need and Purpose*

INCORPORATED 1906 → RATED AAA1

175 ALBANY STREET, CAMBRIDGE, MASS.

SALES AND SERVICE OFFICES IN ALL PRINCIPAL CITIES

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*

members of the state tax commission filed the high court appeal. The circuit court said the state tax collector was entitled to a 20 per cent commission for collecting the taxes.

At the same time the Memphis Natural Gas Company lost its Supreme Court protest against \$40,000 back taxes imposed by two

Mississippi levee districts. The court refused to review the decision of the fifth circuit court of appeals which held the Mississippi and Yazoo levee districts could impose the taxes. Attorneys for the gas company claimed the taxes were barred by an exemption act of the state legislature.

## Missouri

### Sidetrack Municipal Light Plans

**P**LANs for a municipal electric lighting plant would be put aside indefinitely, it was reported last month, if a 10-year lighting contract proposal, approved by Mayor Dickmann of St. Louis and his cabinet, should be enacted by the board of aldermen.

While no company was specified in the bill which would authorize the board of public service to let a 10-year contract for lighting city streets, buildings, and institutions, the Union Electric Light and Power Company, involved in rate litigation before the state commission, was said to be the only concern equipped to enter into the proposed lighting contract.

The bill has a clause providing that after the contract has been in effect five years, the parties may discuss whether the city's interests would be served by a municipal plant, and the city may give five years' notice of withdrawal from its contract, which in any case would expire at the end of the second 5-year period. It would take the city at least five years to build a municipal electric plant, according to E. E. Wall, director of public utilities.

The Union Electric Light and Power Company on June 4th asked the state public service commission to dismiss the valuation and rate hearing pending before it. The commission took the motion under advisement and a decision was expected to be announced later. Associate City Counselor John G. Burkhardt, representing the city of St. Louis, made a statement in which he admitted that the rates of the Union Electric are the lowest of any large electric utility in the country and that the rate of return being earned by the company was not excessive, and considerably below the authorized return of 7 per cent. He asked that the commission retain full jurisdiction of the case for any orders that may be necessary in the future.

### Get Power Franchise

**T**wo rural communities in Cape Girardeau county, Oak Ridge and Pochontas, recently voted at special elections to give 20-year franchises to the Missouri General Utilities Company to supply electric power from its plant at Grand Tower, Ill. The franchise carried in each town without a dissenting vote—Oak Ridge 74 to 0, and Pochontas, 41 to 0.

## Nebraska

### Predicts Combine

**B**ELIEF that directors of the Platte valley, Loup, and Columbus power projects in Nebraska ultimately would favor unified administration was expressed last month by Secretary Ickes. He said in the end they would find "it is in the public interest and that of the three areas concerned."

The Public Works Administration's insistence on unified administration was dropped after the plan was attacked in the District of Columbia Supreme Court.

### Phone Company Files Objections

**T**HE Cortland Telephone Company, which operates in both Gage and Lancaster counties, filed objections with the state railway commission recently against approval of pole line construction of the Southeastern Nebraska

public power project, along highways where telephone lines will be paralleled. The company also stated, after listing its various objections, that it would not urge any objections to the proposed construction if the commission in its order will protect prior rights to the occupancy of the highway.

The company explained that it would be satisfied if the commission would order the power company to pay the cost, approximately \$2,500, of changing its rural lines from grounded to metallic service. Most of the smaller companies in the state use the ground to complete the electric circuit, and to metallicize it it is necessary to string another wire on all lines. With power lines of high voltage on the same highway with grounded lines, telephone service is rendered almost impossible because of induction.

Few of the smaller telephone companies have enough cash reserve to pay for 2-wire construction, and private power companies have usually paid the cost. In this case the

la

forms  
actively  
er jo  
g, dri  
g and  
arco c  
o mo  
be

RC  
18



OR

This 2

*Made to Order*

**FOR PUBLIC  
UTILITIES**



**THE  
ALL YEAR  
MACHINE**

performs cheaply and actively any power job — breaking, driving test rods, asphalt cutting, rock drilling, sheeting and back-fill tamping. Self-contained and self-powered, BARCO can be used wherever the operator has room to work. Two models — H-5 for heavy duty, J-1 for lighter work. We be glad to send you complete details about both.

**BARCO MANUFACTURING CO.,**

1803 W. Winnemac Avenue, Chicago, Illinois



**BARCO**

**PORTABLE GAS line HAMMER**



**Satisfactory all year round  
and under varying weather  
conditions.**

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*

Cortland Telephone Company said that it would practically be compelled to go out of business by the construction of the high volt-

age power lines, while if the project finances transformation to metallic service all will be well.

## New York

### To Propose Merger

As a direct result of the bill recently signed by Governor Lehman permitting the merger of utility companies where there is 95 per cent state ownership, it was reported last month that a merger of all gas and electric companies in the Consolidated Edison system would shortly be proposed to the public service commission. Floyd L. Carlisle, chairman of the board of Consolidated Edison, expressed satisfaction with the bill and stated that it would have real advantages both to customers and stockholders. Another bill signed by Governor Lehman was the so-called "sliding-scale law," which permits the commission to approve profit-sharing agreements similar to the well-known Washington Plan.

### Upholds City's Right To Tax

THE appellate division, by a unanimous decision, recently upheld the right of the city of New York to tax public utilities and rejected a test motion by a subsidiary of the Consolidated Edison Company, which would, in effect, have forced the city to refund \$30,000,000 in utility taxes collected and used for emergency relief purposes.

The decision upheld Justice Joseph M. Callahan who decided on December 9, 1935, that the enabling acts passed by the legislature in 1933 and 1934 to aid the city to collect relief funds to balance its budget specifically provided that the taxes imposed under the enabling act should "be in addition to any and all other taxes."

## North Carolina

### Phone Refunds

OFFICIALS of the Southern Bell Telephone and Telegraph Company last month notified Utilities Commissioner Stanley Winborne they "are working on" the matter of refunds due subscribers for the service period from October 1, 1935, to May 30, 1936. The telephone

company put new lower rates into effect June 1st as a result of a compromise which settled two years of litigation over a rate reduction order of the utilities commission.

Under the compromise agreement the company must refund customers the difference between the old rates and the new rates for the period extending back to October 1, 1935.

## North Dakota

### Phone Tariffs Slashed

THE Northern States Power Company was ordered June 5th by the state board of railroad commissioners to lower telephone rates in the city of Minot, effective on the July 1st billings, with estimated savings of \$9,000 to \$9,500 annually to customers, it is reported.

Rates were reduced in both business and residential classes of service, and service sta-

tion switching was reduced from \$1 to 50 cents a month per subscriber on rural phones. The new rate schedule fixed by the commission was as follows:

Business phone, one-party, \$4; two-party, \$3.50; two-party combined, \$4; four-party, \$3; extension, \$1; residential phone, one-party, \$2.50; two-party, \$2.25; two-party combined, \$2.50; four-party, \$1.70; extension, 50 cents.

## Ohio

### Urges Gas Rate Cut

L. H. Bowson, Cleveland city gas expert, recommended on June 3rd that the city seek a rate reduction of at least 5 cents per thousand cubic feet of gas when the present rate ordinance is renewed with the East Ohio Gas Company. The present rate is 57 cents a thousand cubic feet.

The general impression that the utility company can, without jeopardizing its own security, reduce its rates to Cleveland consumers was strengthened by the report submitted to the council committee on utilities early last month.

The price paid by the East Ohio company for gas at the West Virginia wells was declared "excessive."

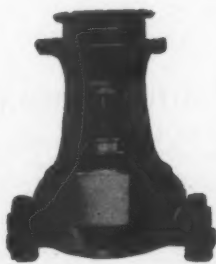
# Quality

is the  
**"Buy-Word"**  
 among modern Municipalities

EXPERIENCE . . . the experience of the recent past years of hand-to-mouth buying . . . has taught Water Works men the folly of buying water meters on a price basis. Their books are strewn with obsolete and deteriorated meters . . . old meters for which repair parts are unavailable . . . meters suddenly antiquated by some new, improved type . . . in short, Water Meters that lacked that supreme essential . . . **QUALITY**. Times have changed. In every field of industry men are once more buying on a quality basis, looking ahead to the value of their investment. In the Water Works field men are buying Trident and Lambert Water Meters.

## Look closely

Nearly 40 years ago—in 1899, to be exact—it left our plant and was installed—a new water meter, embodying then all that was new in design and construction. For over a generation it served steadily and accurately. It became an "old" meter—outwardly at least



## at this meter

until . . . Not long ago we took this "old" meter, and into the 1899 casing slipped new modern parts. They fitted perfectly. We've cut away the old casing to show you the parts in place. The old meter became "new"—in short, interchangeability wiped out deterioration.

# Trident

and LAMBERT Water Meters  
 OVER 6 Million MADE AND SOLD



## Oklahoma

### Gas Rates Cut

THE state corporation commission on June 5th issued an order reducing natural gas rates in 26 Oklahoma cities served by the Community Natural Gas Company and Lone Star Gas Company by 10 cents per thousand cubic feet, thereby terminating five years of litigation before it. Simultaneously, the commission directed that the companies refund to consumers a total of \$165,000—the difference in the rate charged by the company and temporary rate fixed by the commission pending an appeal March 9, 1933.

The companies have charged an average rate in the towns of \$1.50 for the first thousand cubic feet or \$1.35 per thousand for prompt payment of bills and 67½ cents net for each additional thousand after the first step. The new rate reduces the gate rate charged by the Lone Star, directing that the reduction be passed on to the consumer.

Attorneys for the company have announced that an appeal will be made from the ruling. Pending outcome of the appeal, refund of the \$165,000 will not be made. It was estimated that about 10,500 persons would benefit if the ruling were sustained.

## Oregon

### Electric Rates Held Favorable

A. C. McMICKEN, general sales manager of the Portland General Electric Company, early last month announced receipt of a letter from the Rural Electrification Administration which declared rates charged in the lower Willamette valley and adjacent Columbia river territory to be "very favorable." The government agency mentioned the high average consumption of electricity in this area and added that the cost of \$3.48 for 100 kilowatt hours was a very favorable rate.

Regarding the proposed public utility districts in Oregon, the administration said:

The rural electrification administration was created for the purpose of extending electric lines into rural areas now without such service. We would not, therefore, make any loans for the purpose of building distribution lines on the opposite side of the road from existing distribution lines, nor for the purpose of building lines to reach properties to which electric service is now available from existing sources, nor from the purchase of any existing facilities.

## Pennsylvania

### Rejects Utility Bill

THE state house on June 8th by a vote of 104 to 79 defeated the Holland bill proposing to tax real estate of public service corporations for school purposes but passed finally the \$2,000,000 Weiss-Andrews flood control bill. The lower chamber recommitted the Eroo electric power tax for further consideration and possible amendment. The rejection of the Holland bill was the second for it in a week.

was considerably in excess of the 84,000,000 cubic feet produced annually by the gas wells.

### Forecasts Natural Gas Service

WILLIAM W. Bodine, executive vice president of the United Gas Improvement Company, on June 8th said it would be "several months at least" before natural gas would be supplied to system subsidiaries in eastern Pennsylvania. He gave formal confirmation that Harrisburg, Lebanon, Allentown, Bethlehem, and Reading would be served with gas purchased under contract from the Columbia Gas and Electric Corporation. Philadelphia will not receive such service.

Bodine pointed out that the plan had been discussed only informally with the public service commission and said "there are several important questions of a character requiring definite settlement before any conclusive announcement can be made." It was intimated from another source that the physical changeover to natural gas could not be accomplished before the summer of 1937.

### Natural Gas Tax

AN emergency tax of 3 cents per thousand cubic feet on all natural gas sold to consumers in Pennsylvania was proposed by Representative H. G. Andrews, of Cambria, in a bill introduced June 1st in the state house. Provisions of the bill called for collection of the tax for a period of one year from its effective date.

It was said that gas brought into the state

No. 4 of a series of messages to Public Utility executives pointing out opportunities for load-building by promoting the use of electric arc welding.

# Join the parade of GARAGE MEN

They're towing in profits with the K. W. H.\*

## Free Instruction for Power Salesmen

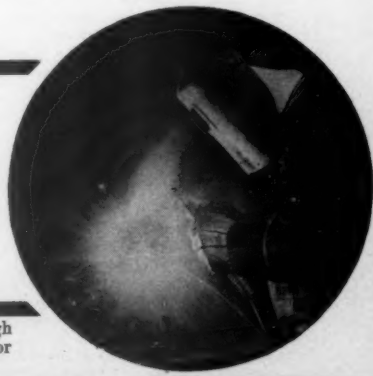
In several cities, the local Lincoln engineers are contributing their services to the instruction of power salesmen, periodically, in the various phases of arc welding application. These blackboard talks give the salesmen sufficient knowledge of arc welding so that they can discuss it intelligently with prospects. Are you interested in securing this service? Just get in touch with our main office in Cleveland, Ohio.

Automotive service shops . . . from those of the large fleet owners down to the highway garage on Main Street are falling in line to get the profits of electric arc welding. In a short time and at little cost, you could swell this parade to vast proportions!

New developments in welding machines and shielded arc electrodes permit a host of profitable short-cuts in the repairing of fenders, bumpers, bodies, chassis, axle housings, crank cases, engine blocks and heads. Many fleet repair shops are even hard-facing their brake shoes and building their own bus or truck bodies, by this highly efficient welding process.

Why not better acquaint yourself with the load-building possibilities of many such markets which NOW warrant sales effort? Call in the Lincoln man nearby or just communicate with **THE LINCOLN ELECTRIC COMPANY**, Dept. YY-272, Cleveland, Ohio. Largest Manufacturers of Arc Welding Equipment in the World.

# LINCOLN



Every arc welding machine you put to work adds a high power-factor motor load to your line. 1.75 K.W.H. for every pound of electrode metal used!

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

## Rhode Island

### Gas Rates Slashed

**F**REDERICK A. Young, chief of the state division of public utilities on June 2nd announced reduced rates for users of gas in Riverside, Barrington, East Greenwich, Apponaug, and other sections of Warwick, and predicted that electric bills would soon be lowered.

Consumers of gas in the communities mentioned will save \$21,000 a year after the new rates become effective July 1st, according to Mr. Young's estimate. The reductions were made possible as the result of conferences with Providence Gas Company officials. They range from 10 to 15 cents for 1,000 cubic feet

used within any one month and include a drop in the minimum charge from \$1 to 50 cents, a rate that has been in effect in Barrington for some time.

The prediction regarding the reduction in electric rates accompanied an announcement by Mr. Young that his division has formally approved the action of Narragansett Electric Company in calling its outstanding first mortgage lien bonds, permission for which was given by the Securities and Exchange Commission.

Simplification of the electric company's corporate structure was said to be the aim of the negotiations Mr. Young has been carrying on for some time.

## Tennessee

### Offers Inducement Rates

**T**HE Chattanooga Gas Company on June 2nd became the first gas company in Tennessee to offer promotional rates as an inducement to additional usage. The new rate schedule, patterned after electric power rates used the last two years by power companies was approved by the state railroad and public utilities commission on June 3rd.

Besides its ordinary basic rate, the company added two completely new classifications. Rate changes are effective on all bills rendered on or after July 1st. In its order, the commission said the new rates would result in a substantial reduction for any customer who uses an increased amount of gas.

burgh contractors, served notice that it was canceling the contract awarded to it by the city to build the first unit of the proposed municipal plant.

### Rejects TVA Power

**T**HE Trenton city council recently accepted a report of a council committee that the contract offered several months ago by the Tennessee Valley Authority be declined. Trenton was one of eight cities in west Tennessee TVA officials offered to hook up on a power loop. All have municipal distribution plants.

The council committee said acceptance of the contract would result in a possible tax increase of \$1 or more per \$100 assessed value on Trenton property. It was also estimated that \$40,000 would be needed for a new power unit at the present plant.

### Court Orders Briefs

**F**OR the second time in thirteen months, the plans of Knoxville for a municipal power plant were weighed by the Knox county chancery court. Arguments in the second trial of the suit by the Tennessee Public Service Company to restrain the city from going ahead with it were concluded early last month and briefs were ordered to be filed by both sides. No decision was expected until the middle of July.

In the 3-day hearing, the Tennessee Public Service Company attempted to prove that Chancellor A. E. Mitchell of Knox county, should make permanent a restraining order stopping the city from carrying out new contracts with the TVA for power and the PWA for a \$2,600,000 loan and grant to be used in constructing a municipal power distribution system.

Both sides have indicated that whatever the outcome in chancery court, the case is almost sure to go to the state supreme court for further adjudication.

The city received a setback on the eve of its court battle when Hess & Barton, Inc., Pitts-

### Federal Competition Condemned Recently

**S**TOCKHOLDERS of the Commonwealth & Southern Corp. at their annual meeting were cautioned by Wendell L. Willkie, president of the concern, to use care to avoid being misled by business increases stimulated (principally in the Tennessee valley area) by the "almost limitless spending of public money" by the government with the creation of corresponding Federal deficits.

The Commonwealth & Southern system reported recently earnings of 4 cents a share on its 33,673,325 common shares for twelve months ended May 31st, this year, the best results since March, 1933.

The government expenditures, Mr. Willkie asserted, prevent the normal capital investment in commerce and industry which is indispensable to decrease unemployment.

The utility industry alone could employ tens

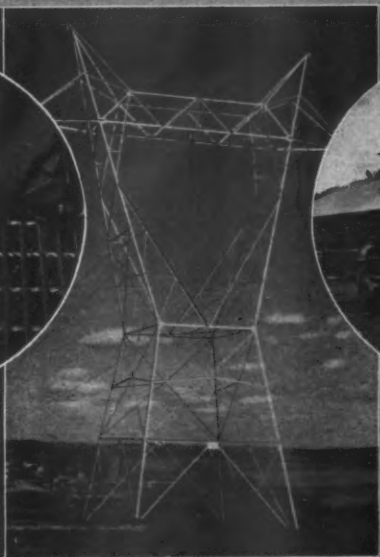
# BLAW-KNOX PRODUCTS

for

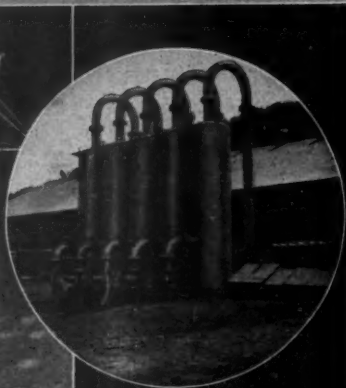
## PUBLIC UTILITIES



**STEEL GRATING**



**TRANSMISSION TOWERS**



**GAS CLEANERS**



**STEEL BUILDINGS**



**CLAMSHELL BUCKETS**

Thousands of miles of transmission towers... structural work necessitating highly specialized fabrication... enormous areas of Electroforged open flooring... standard steel buildings for all uses... gas cleaners for natural gas lines... steel forms for concrete tunnels, walls, etc.,... steam purifiers, desuperheaters... clamshell buckets... and other products of Blaw-Knox manufacture are at work for the Public Utilities of America.

The fact that Blaw-Knox Products are in accord with

the rigid standards of Public Utility purchasing is proof not only of the merit of the products themselves but of the house behind the products.

# BLAW-KNOX COMPANY

2057 FARMERS BANK BUILDING, PITTSBURGH, PA.

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

of thousands of additional men in construction and other activities if it were freed from certain provisions of the Public Utility Act of 1935, the threat of subsidized Federal competition, and the constant assault of Federal commissions and administrators, he declared.

The agitation against the public utilities is emanating from those in Washington who

would socialize the utilities and later socialize other industries, Mr. Willkie asserted.

It is to be noted, he added, that none of the agitation comes from the consumers themselves. "Our corporation," he added, "serves about 2,900 communities and the consumers are all satisfied, even our customers in the Tennessee valley."

## Texas

### Dam Construction to Go On

OFFICIALS of the lower Colorado River Authority were informed on June 4th that under an agreement in the suit of Texas utilities companies, construction on the Buchanan dam could be continued and work on the Roy Inks and Marshall Ford dams could be started. Raymond Brooks, secretary of the directors, said court orders agreed on by government counsel would probably postpone final trial of the suit until fall and modify the temporary restraining order. Restrictions of the injunction previously had been loosened.

The utility companies sought to enjoin the expenditure of government funds for construction of the dams and completion of hydroelectric power projects proposed by both the

Colorado River Authority and the Brazos river district.

### Approves Voluntary Cut

A 7 PER CENT reduction in electric rates for domestic and small industrial consumers, estimated to save them approximately \$360,000 a year, was approved June 5th by Dallas councilmen after the proposal of the Dallas Power and Light Co. was submitted by Utilities Supervisor J. F. Leopold.

Mr. Leopold had originally agreed to a 6 per cent reduction but he later obtained another concession by getting the minimum room charge eliminated from local schedules which added another one per cent saving. Elimination of the minimum room charge meant an additional saving of approximately \$60,000.

## Washington

### Municipal Railway Refinancing

CITY Light Superintendent J. D. Ross of Seattle returned to that city June 4th from Washington, D. C., believing the municipal railway's refinancing and rehabilitation problem at last could be solved under preliminary plans which he was to lay before Mayor John F. Dore and the city council. A \$6,500,000 financing program, backed exclusively by

railway bonds—with no involvement of city lighting security or the city's general credit—was expected to be the solution.

Mr. Ross said he was assured by negotiations with eastern investment bankers of a satisfactory refinancing, especially if Councilman Frank J. Laube succeeds in getting \$2,000,000 Federal money for the railroad. The Rainier valley transportation requirements may also be included in the program.

## Wisconsin

### Back Power Plan

WISCONSIN public utility officials on June 5th endorsed plans for statewide coordination of generation and transmission facilities looking toward an integrated state power program controlled by themselves. They adopted the suggestion of Fred S. Hunt, chairman of the public service commission, that it would be better for them to work out their own coordination plan than to wait for its imposition by Federal or state agencies. Commissioner Hunt's recommendation that they appoint a committee to develop the program for later ratification was approved by the thirty executives of leading power companies who met with Hunt and other commission officials.

### Asks Federal Funds

APPLICATION was made last month for Federal funds to construct electric generating plants to serve two rural areas because private utilities have failed to offer reasonable wholesale rates, the state rural electrification coordination office has announced. The request for funds was directed to Morris L. Cooke, Federal REA administrator, to construct a generating plant at Medford to serve Taylor, Lincoln, Marathon, Clark, and Chippewa rural electrification projects, and another electric generating plant conveniently located for the purpose of supplying customers in Pierce, Buffalo, Trempealeau, Pepin, and St. Croix counties.



# SANGAMO



**TYPE HFA**  
Single Phase Watthour Meter

*Manufacturers of . . .*

Alternating Current Watthour Meters,  
Direct Current Watthour Meters,  
Ampere Hour Meters, Instrument Trans-  
formers, Demand Meters, A.C. Syn-  
chronous Motor Time-switch, A.C. and  
D.C. Electrically Wound Time-switches,  
Radio Condensers, Sign Flashers.

**SANGAMO ELECTRIC COMPANY**  
SPRINGFIELD, ILLINOIS



**DELTA-STAR ELECTRIC CO.**  
2400 Block, Fulton St., Chicago, Illinois

CONCENTRATE ON IT! . . . THE MORE-THAN-MODERN

# ESTATE ELECTRIC RANGE



NO OTHER ELECTRIC RANGE CAN GIVE YOUR CUSTOMERS SO MANY PRACTICAL COOKING FEATURES — NO OTHER RANGE CAN GIVE YOU SO MANY SALES-CLINCHING ADVANTAGES. THE SUPER-SMART 1936 ESTATE!

THE ESTATE STOVE COMPANY  
Hamilton, Ohio

## APPROVED BY



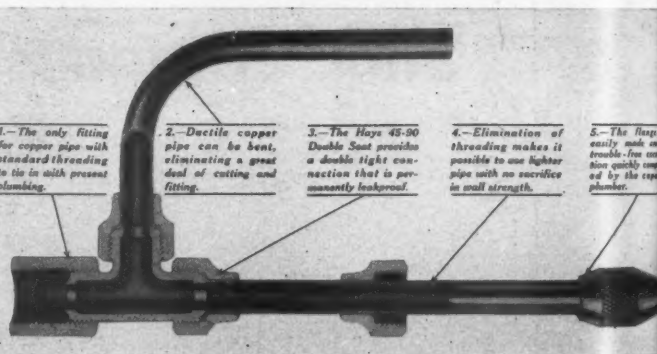
1.—The only fitting for copper pipe with standard threading to tie in with present plumbing.

2.—Ductile copper pipe can be bent, eliminating a great deal of cutting and fitting.

3.—The Hays 45-90 Double Seat provides a double tight connection that is permanently leakproof.

4.—Elimination of threading makes it possible to use lighter pipe with no sacrifice in wall strength.

5.—The Hays easily made and flexible-free connection quickly replaced by the expert plumber.



## More than 400 STYLES and SIZES of DOUBLE SEALS to select from . . .

A close study of the illustration will suggest scores of uses in your plant for the Hays Copper Plumbing Method. The heart of the method is of course, the Double Seal fitting, of which there are over 400 Styles and Sizes. Hook up new appliances; make plant piping repairs and install service lines for water or gas with the Hays Copper Method.

Double Seals are used to pipe water, gas, gasoline, oil, air and many chemicals. It is the only method that ties in 100% with Iron pipe. Write today for complete details.

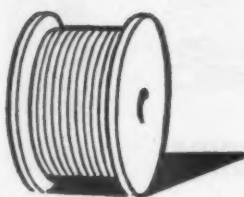
HAYS MANUFACTURING CO.

ERIE, PA.

UNDERWRITERS'  
LABORATORIES

# Specify HAYS DOUBLE SEALS

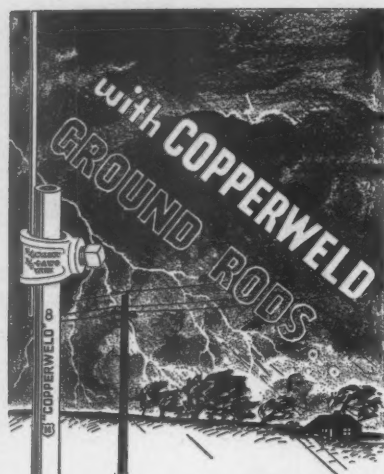
# A·C·S·R



The letters which identify Aluminum Cable Steel Reinforced  
and also for an engineering service which works shoulder to  
shoulder with transmission engineers to achieve maximum  
economy with highest standards. Aluminum Company  
of America, 2134 Gulf Building, Pittsburgh, Pennsylvania.

## ALCOA · ALUMINUM





## PROTECTIVE GROUNDS ARE BETTER EQUIPPED TO DO THEIR PART

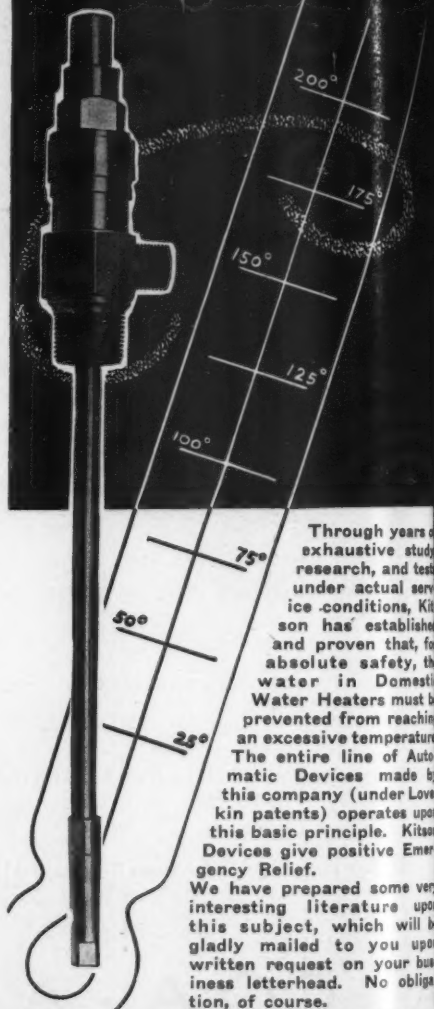
Installed out of sight, where periodic inspection is impractical, Copperweld Ground Rods and Grounding Clamps insure the dependability of your protective grounds.

Although Copperweld Ground Rods offer the permanence of copper, because of their rust-proof copper exterior, they are nevertheless theft-proof. Also, they can be driven quickly, without bending, as the steel core of these rods makes them extremely rigid.

*Specify Copperweld Rods  
and Clamps—and guard  
against substitutions*

**COPPERWELD STEEL COMPANY**  
GLASSPORT PA.

## LIMITS THE TEMPERATURE



## KITSON COMPANY

2409-15 Westmoreland St. Philadelphia, Pa.

Kitson Safety Devices  
(Lovelock Patents) for  
Domestic Water Heaters

Quality Brass Goods  
for Gas, Water  
and All Plumbing Uses

ESTABLISHED 1897

IE  
RE

ears  
study  
d test  
serv  
s, Kil  
lisha  
at, fo  
y, the  
nesti  
ust b  
achin  
ratur  
Auto-  
de by  
Love  
upon  
Kitson  
Emer-

very  
upon  
ill be  
upon  
bus-  
liga-

SE

Pa.

1



## Throw Your Voice to the AUDITOR

Here is a trick . . . and it is not ventriloquism . . . that busy executives are doing dozens of times every day and it saves time, money and nerves.

You merely flick a key and talk. Instantly your voice, *broadcast* through the super-sensitive microphone or *whispered* in privacy through the special hand set, is heard in the Auditor's Dept., Engineering Dept., Operating Dept.—in any part of the organization selected by your forefinger.

Telematic is the name of this ingenious instant system of *intracommunication*. It has no connection with your regular telephone switchboard. Hence it does not stop outside calls or clog inside lines. Telematic provides instant contact between departments for any information required during telephone conversations.

Numbering among the thousands of TELEMATIC users are New York Edison Co., Kansas City Power & Light, Public Service of N. J., Columbus Street Railway Power & Light, and many others. The coupon below makes it easy for you to secure the names of users in your locality so that you can check their experience and satisfaction with Telematic.

Or, if you prefer, check the coupon to indicate that you would like a Hearing-Is-Believing demonstration right in your office. No obligation, of course.

## TELEMATIC

DICTOGRAPH PRODUCTS CO. Inc.

580 FIFTH AVE.

NEW YORK CITY

Branches in all Principal Cities

DICTOGRAPH PRODUCTS CO. Dept. PU-1  
580 FIFTH AVE., NEW YORK, N. Y.

(Please Check Service Desired)

- ☐ Local Telematic Users  
☐ Hearing-Is-Believing Demonstration

Name .....

Bus. Org. ....

Address .....



FOR DEVELOPMENTS IN OIL RESISTANCE

**Consult**  
YOUR  
**ARCO**  
**Library**  
OF  
Maintenance  
**Paints**

*A*LERT Engineering and Purchasing Departments are invited to send for this essential library of Maintenance Data...including (1) Up-to-The-Minute Releases from the ARCO Research laboratories; (2) Cumulative development, in ready reference form, of 57 years' experience in formulating maintenance paints for Public Utilities. Address: Department F, THE ARCO COMPANY...CLEVELAND or LOS ANGELES.



# Cities Service Lubricants Battle Against Waste

**F**ARSIGHTED operating executives realize what the effects of waste, caused by improper lubrication, can do to the earnings statements of their company. That is why so many choose Cities Service lubricants to assist them in eliminating unnecessary waste and in cutting down operating costs.

Cities Service lubricants in actual service have proved their ability to cut down power losses due to excessive friction; to con-



sume slowly; to give protection against unnecessary breakdowns and replacement costs; and to keep machinery moving smoothly, quietly, powerfully, without needless interruptions.

Cities Service petroleum products are backed by an organization whose experts have the benefit of 73 years of practical lubrication experience. One of these experts will be glad to discuss your lubrication problems with you.



## CITIES SERVICE INDUSTRIAL OILS

Compressor Oils  
Cutting Oils  
Diesel Engine Oils  
Cylinder Oils  
Star Ice Machine Oils  
Leather Finishing Oils  
Loom Oils

Marine Engine Oils  
Quenching and Tempering Oils  
Sewing Machine Oils  
Spindle Oils  
Transformer Oils  
Turbine Oils  
Wool Oils

*Cities Service Radio Concert every Friday evening, 8:00 P. M. Eastern Standard Time.*

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*



**L&H**  
*Air Speed*  
UNITS

Real Speed! The glowing coils of the Air Speed unit cook as FAST as food will cook. Exclusive air insulated design increases efficiency. No other unit is faster or more economical.

**Get the Facts NOW!**

**L&H** *Advanced*  
**ELECTRIC RANGES**

**A. J. LINDEMANN & HOVERSON COMPANY**

**Milwaukee**

**Wisconsin**

**New York**

**Chicago**

**San Francisco**

#### DAVEY LINE CLEARING SERVICE

##### *Line for Line Clearing?*

YOU CAN FIND some special advantages for pruning trees at almost any time of the year, if you know a lot about trees and the way they behave.

One principal reason for getting your tree clearance now is that tree growth for this year is virtually complete. So, you see, that you can prune the trees away from the wires now without having to worry about new growth until next spring. Between now and the spring of 1938, there is only the growing season of 1937 to contend with. That gives you an unusually long period of freedom from tree troubles from one line clearing operation.

And, of course, if conditions permit, the trees can be pruned back enough to provide clearance for two or more years, which would run your trouble-free period over to the spring of 1939, or later.

It's worth a thought or two, isn't it?

THE DAVEY TREE EXPERT CO.,

Kent, Ohio

**DAVEY TREE SURGEONS**

## Star Brass Manufacturing Co.

104-114 East Dedham St.,  
BOSTON, MASS.

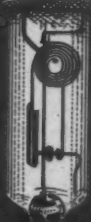
*Makers of Highest Quality*  
"Non-Corrosive" Pressure and Vacuum Gages—Safety and Relief Valves—Globe, Angle and Gate Valves—Water Gages—Gage Cocks Whistles



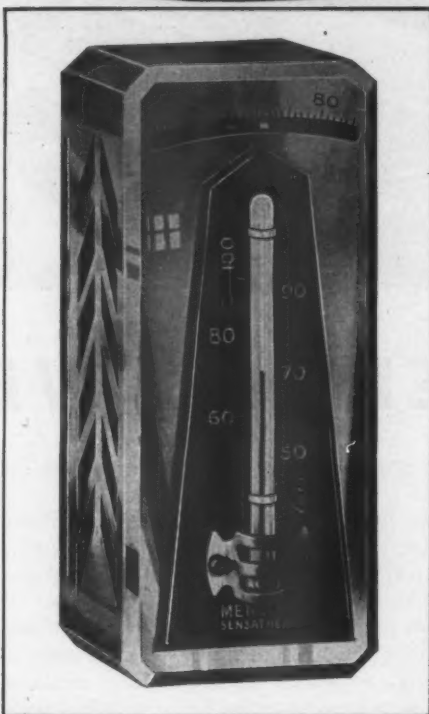
New York  
Pittsburgh  
Chicago  
San Francisco  
Buffalo  
Cleveland  
St. Louis  
Shreveport, La.

## IMPORTANCE OF A MERCURY SWITCH

MERCURIO  
SWITCH  
9-8



THE MERCURIO SEALED MERCURY CONTACT SWITCH OFFERS THE MOST SCIENTIFIC MEANS FOR OPENING AND CLOSING AN ELECTRICAL CIRCUIT. IT CANNOT BE AFFECTED BY DUST, DIRT OR CORROSION. IT INSURES BETTER CONTROL PERFORMANCE WHICH MAKES SATISFIED OWNERS. ALL MERCURIO CONTROLS HAVE MERCURY CONTACT SWITCHES. THEY WILL OPERATE INDEFINITELY WITHOUT DETEIORATION.



## MERCURIO SENSATHERM

- The thermostat that is widely known for its sensitivity. The unique construction of the mercury switch (illustrated on top of page) in the Sensatherm, makes it possible to maintain an even room temperature without the assistance of any artificial acceleration.
- Extensively used with all types of automatic heating equipment. This instrument is beautiful in appearance and perfect in performance.
- The Mercoid Corporation have been pioneers in the automatic control field, and make a complete line of controls for heating, air conditioning, refrigeration and industrial applications. They are the sole manufacturers of The Mercoid Switch. Write for catalog No. 100-PA.

THE MERCURIO CORPORATION + 4201 BELMONT AVENUE + CHICAGO, ILLINOIS

DAYS TO GET THE REST



## The **BELT CONVEYOR**

● For handling coal in the power plant the belt conveyor offers a reliable, flexible unit of large capacity and economy.

Link-Belt conveyors of this type have been highly perfected. The service given by the conveyor depends largely on the construction of the idlers, and it is upon these that Link-Belt has focused particular attention; building into them the results of years of experience.

Link-Belt equipment for the power plant includes conveyors of the belt, apron, flight, screw and other types; bucket carriers; skip hoists; crushers; feeders; weigh larries; car dumpers; water intake screens; locomotive and crawler type cranes; underfeed screw type stokers; portable belt conveyors; bucket elevators and a complete line of accessories—equipment that has built into it tried and proved features, demonstrated as most sound and practical in hundreds of power plants.

Send for catalog. Address Link-Belt Company, Chicago, Philadelphia, Indianapolis, Atlanta, San Francisco, Toronto, or any of our offices located in principal cities.

# LINK-BELT


## COAL AND ASHES HANDLING EQUIPMENT

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*



# CRESCENT • WIRE

*for economical, lasting SERVICE*

- 
- ← Tinned annealed copper conductors
  - ← 30% long-life rubber insulation
  - ← Colored weatherproof flame retarding cotton braid
  - ← Concentric tinned copper neutral conductors
  - ← Flat galvanized steel armor
  - ← Double moistureproof tape belt
  - ← Weatherproof saturated heavy cotton braid
  - ← Flame retarding finish suitable for painting color of supporting surface

**SIGNAL CABLE—CONTROL CABLE—PARKWAY CABLE—MAGNET WIRE—RUBBER POWER CABLE—LEAD COVERED CABLE—VARNISHED CAMBRIC CABLE—WEATHERPROOF WIRE**

*All types of Building Wire and all kinds of Special Cables to meet A.S.T.M., A.R.A., I.P.C.E.A., and all Railroad, Government and Utility Companies' specifications.*

**SERVICE  
ENTRANCE  
CABLE**

Underwriters  
Laboratory  
Type SE  
Style ABN

**CRESCENT**  
**INSULATED WIRE & CABLE CO. INC**  
TRENTON, NEW JERSEY

## PIPE STOPPERS



### All Types PIPE LINE SUPPLIES

Goodman Stoppers  
Gardner-Goodman Stoppers  
Goodman-Peden Stoppers  
Goodman Cylindrical Stoppers  
Bags—Rubber, Canvas Covered  
Plugs, Service & Expansion  
Pumps  
Masks  
Brushes  
Tape—Soap & Binding

*Catalogue mailed on request.*

**SAFETY GAS MAIN STOPPER CO.**

523 Atlantic Avenue  
Brooklyn, New York

## The Trend to Dictaphone Sweeps On

To your secretary, it means all that note-taking time is released for valuable work. To you, it means instant dictation facilities always available, without dependence on anybody else. That's why we say this modern dictating instrument doubles your ability to get things done.

### DICTAPHONE

Sales Corporation  
420 Lexington Avenue  
New York City

# RAY-O-VAC

Dependable service—long hours of it—on and off—off and on! Utilities put flashlights and batteries to the severest tests, but Ray-O-Vac industrial flashlights and batteries have proven they can take it. That's why each year more and more utilities specify "Ray-O-Vac".

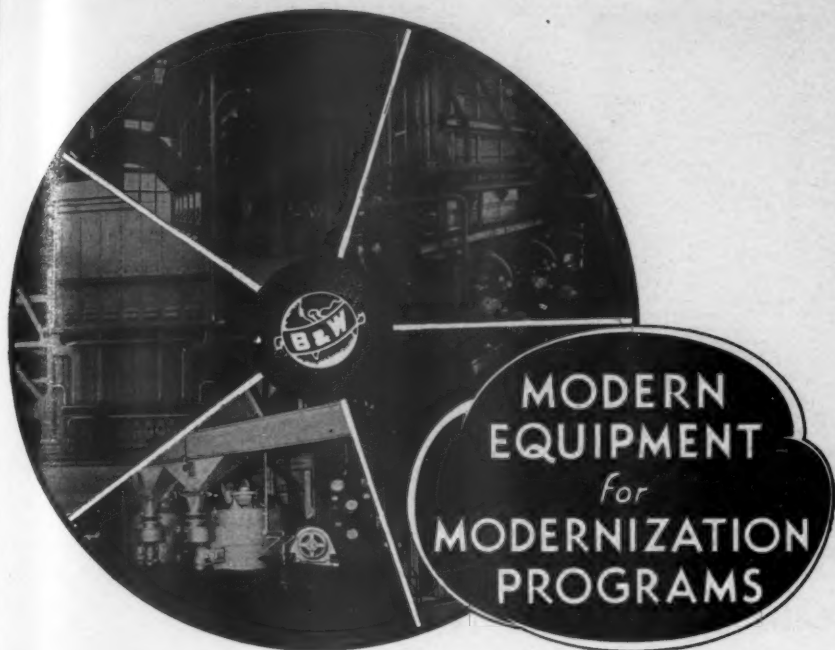


Pictured here, the famous guaranteed foolproof Rotomatic Switch—exclusively a Ray-O-Vac feature.

## RAY-O-VAC COMPANY

Formerly FRENCH BATTERY COMPANY  
MAIN OFFICES and PLANT—MADISON, WISCONSIN  
Additional Factories at Clinton, Massachusetts, Lancaster, Ohio

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*



Never before has The Babcock & Wilcox Company had such a wide range of equipment suitable for modernizing older power stations that are now obsolescent because of the great strides made during the past ten years in the economical generation of power.

Since 1929, the Company has developed, or announced as available: new types of boilers, a new water-cooled furnace construction, a pulverizer of 50-tons capacity, new types of fuel-burning equipment, and many improvements made in its other products.

The Babcock & Wilcox Company is fully prepared to help producers of power to carry out modernization programs involving changes, such as the installation of modern slag-tap furnaces with water-cooled floors, high-pressure boilers super-imposed on existing low-pressure systems, or high-pressure high-temperature units.

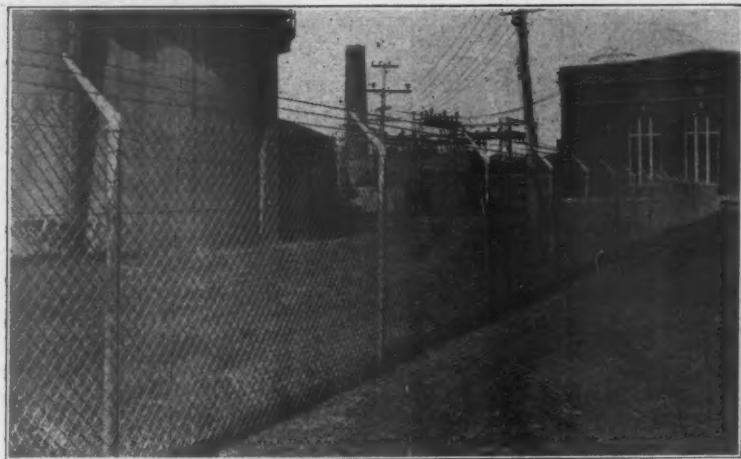
Babcock & Wilcox Engineers will be glad to discuss with executives and engineers the economic application of these new and improved products.

The Babcock & Wilcox Company . . . 85 Liberty Street . . . N. Y.

**BABCOCK & WILCOX**

6-4-A

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



No weak spots to corrosion to attack. The Bethanized Wire can be wrapped around its own diameter without breaking or flaking its corrosion-defying zinc coating.

## AT LAST! CHAIN LINK FENCE THAT CAN

## *STAND THE WRAP!*



Here are the quick facts. Unlike other chain link wire, the zinc coating on Bethanized Wire is chemically pure—free from any vulnerable iron content. It is smooth and uniform—free from rough or thin spots. And it is extremely ductile—not hard, brittle and flaky. Twist the wire, bend it double, wrap it around itself—you just can't break the zinc coating and expose the steel core to corrosion.

Think what that means. An Anchor Fence of Bethanized Wire is a fence with no flaws in its pure zinc armor—no cracks or crevices through which

corrosion can creep in. Because Bethanized Wire can "stand the wrap," these Anchor Fences stand up for many years beyond the lifetime of any other chain link fence—even in industrial atmospheres that are heavy with soot, salt, sulphur and other corroding agents. And now there's no premium—no extra cost—for Bethanized Wire.

Send for the free book of facts about these better looking, longer lasting Anchor Fences—and about Anchor's nationwide sales and erecting service. Write today—to the address below.

## ANCHOR Fences

OF *BETHANIZED* WIRE

ANCHOR POST FENCE COMPANY, 6630 EASTERN AVENUE, BALTIMORE, MARYLAND

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*



**"No need to  
check these  
valves, Sir;  
you know  
they're  
Nordstroms"**



*Nordstrom Valves, fortified with "Sealdport" lubrication, maintain a permanently secure seal, preventing leakage internally and externally. The safest valves by every test.*

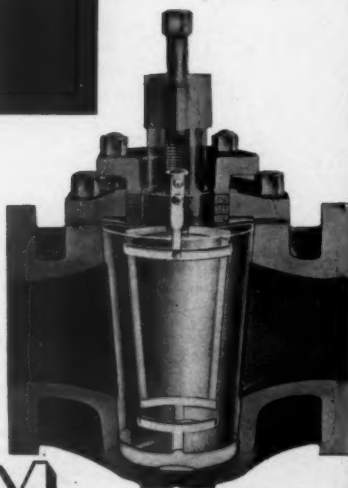


## Faithful valve performance requires no "watchdog"

Only Nordstroms meet every major valve need. Recommended for every service where efficient valve performance is necessary. For temperatures ranging from  $-60^{\circ}$  to  $+600^{\circ}$  and for working pressures to 300 lbs. Sizes from  $\frac{1}{2}$ " to 30". Ask for Bulletins.

**PERCO NORDSTROM VALVE COMPANY**  
a subsidiary of

**PITTSBURGH EQUITABLE METER COMPANY**  
Main Offices: Pittsburgh, Penna. Branch Offices: New York City, Buffalo, Philadelphia, Columbia, Memphis, Atlanta, Chicago, Kansas City, Tulsa, Houston, Los Angeles and Oakland.



# NORDSTROM

*Lubricated* **VALVES**





Large statements made small without impairing legibility. We specialize in S. E. C. reports. Condensation with proper typography. 60 styles type.

## **VARI-TYPER** COMPOSING MACHINE

Write us for Demonstration or Literature.

**RALPH C. COXHEAD CORPORATION**  
MANUFACTURERS

17 PARK PLACE, NEW YORK, N. Y.

*Represented in nearly all cities throughout the World*

Reserved for a  
MSA Advertiser

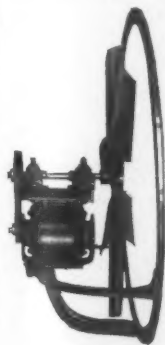
## Kisco Ventilating And Air Moving Equipment Was Designed For Your Clients' Comfort

*Specify KISCO—It Has No Equal*



**The Kisco Master Hi-Pedestal  
Belt-Drive Cooler** →

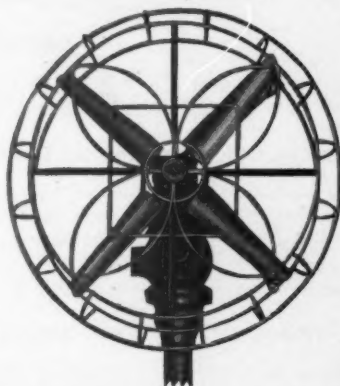
When others fail, specify this model for quiet, effective air recirculation. Designed and constructed for style and performance. Attractively finished—ruggedly constructed. No danger of tipping. Recommended for applications where large volumes of air are to be moved and also for quiet operation.



### **The Kisco Belt-Drive Exhaustor and Homilator**

The field for attic or home ventilation is unlimited. Kisco engineers have designed two models, which were quickly recognized through the effective and quiet operation. Space does not permit further details. Write for our 1936 Fan Portfolio—V. U. 7.

*Learn about the complete Kisco Line of Exhaustors, Base, Ceiling, and Wall Bracket Air Movers, Coolers, and Recirculators.*



**KISCO BOILER & KISCO ENGINEERING CO.**

4333-35 DUNCAN AVE.

ST. LOUIS, MO.

**VENTILATING DIVISION**

## Designed for Electric Range Economy



### INCREASE YOUR RANGE SALES!

The final test of your range is its speed and efficiency of operation—which result in consumer satisfaction. You can maintain these at a maximum with West Bend cooking sets—specially designed for the electric range.

### HEATS EVENLY AND QUICKLY

The flat bottom of each utensil has a special heat-absorbing finish and fits snugly over the heating element. The diameter of these utensils conforms to the diameter of the heating element, thereby insuring complete coverage of the element.

Other aids to speed and economy are the straight sides and high polish on the outside. These features retard the escape of

heat and impart an even distribution of it on the inside.

### FOR WATERLESS COOKING

The set is designed for Waterless Cooking—the modern, healthful way. The close-fitting covers, with sunken “sanitary seal,” retain all the natural vitamins, rich juices, essential elements, and genuine flavors of the food.

### PATENTED HANDLE CONSTRUCTION

Made of heavy gauge aluminum, the set can be used in the oven or on top of the stove for general cooking. The sauce pans and skillet are equipped with a patented handle construction—a square shaft prevents the handle from turning. Removable feature of handles allows use of the utensils in the oven.

*Write for complete information regarding our line of range sets and load-building appliances!*

**West Bend Aluminum Company**  
Dept. 66                      West Bend, Wisconsin

# PERMAFLECTOR

**INDUSTRIAL LIGHTING EQUIPMENT for  
SAFETY—PRODUCTION—EFFICIENCY**



Permaflexors No. C. 1000-S installed in the plant of General Steel Castings Corporation, Eddystone, Pa.



No. 1-505-S

A very efficient high bay unit, for mounting 25 to 50 feet above the floor.



No. C. 1000-S

A very powerful efficient high bay lighting unit, for mounting 50 or more feet above the floor.

Now that we have put the depression behind us and are again on the road to prosperity, don't forget the vast field offered by Industrial Lighting.

Industrial plants are modernizing—new plants are being built and old ones remodeled. New machinery is being installed; new equipment and tools are being bought. But the most important tool in any industrial plant is the lighting equipment. How much work is done, how quickly it is done, and how well it is done, depends upon the workers' ability to see well.

Recommend and sell Permaflexor Lighting to your industrial customers. A complete line of high bay, intermediate and low mounting units, there is a Permaflexor unit for every industrial lighting need.

Call on our Engineering Department at any time for suggestions. They will be glad to work with you in promoting Better Light for Better Sight.

**PITTSBURGH REFLECTOR COMPANY**

OLIVER BUILDING



PITTSBURGH, PA.



**VULCAN**  
**SOOT BLOWERS**

*Durable  
Dependable  
Service*

**VULCAN SOOT BLOWER CORPORATION**  
*Du Bois Pennsylvania*

## "STEAM CONDENSERS"

Condensing equipment designed and built by C. H. Wheeler can be depended upon to operate efficiently even after years of service.

If you have a condensing problem bring it to

**C. H. WHEELER MFG. CO.**  
19th St., Lehigh & Sedgley Aves.,  
Philadelphia, Pa.

**C. H. WHEELER OF PHILADELPHIA**

Reserved for  
a  
MSA Advertiser

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*



# GARRISON

## The Modern DRY Method of FIRE Extinguishment

BULLETIN NO. 3—for the information of PUBLIC UTILITY EXECUTIVES

### HOW GARRISON COMPOUND OPERATES

GARRISON COMPOUND—described by a Utility Committee as “the safest and quickest method of getting oil fires involving electric equipment under control”—is a laboratory-produced DRY compound of 4 selected U.S.P. chemical compounds, the base of which is a mineral carbonate of definite granulation and shape.

The moment GARRISON COMPOUND reaches the heated area, it is broken down—instantly—and releases a large volume of inert gas (which will not support combustion). None of this gas is lost between the nozzle of the appliance and the seat of combustion—inert gas is not made in the appliance—it is made at the seat of combustion. This inert gas (being heavier than air) immediately dilutes the oxygen content of the air in the vicinity of the fire, thus SMOTHERING the flames and cooling the surrounding area.

GARRISON COMPOUND will not freeze, evaporate or deteriorate. It will give the same certain efficiency under all temperatures.

The hotter the fire the more effective it is. And it extinguishes without any wet, muss, or damage of any kind to equipment, property, or operators.

Send for “GARRISON—The Modern DRY Method of Fire Extinguishment,” our 36-page brochure which goes into detail and gives examples.



*Photomicrograph of GARRISON DRY COMPOUND magnified 100 X Linear. The minute particles of the COMPOUND are instantaneously broken down upon being subjected to heat, fire or flame.*

*Sole Exclusive Manufacturing and Sales Licensee under all Du Gas Company patents—U. S. Patents 1,793,420, 1,839,658, 1,866,981, and others issued, and patents applied for—and foreign patents both issued and pending—as well as under Garrison “patent applications pending.”*

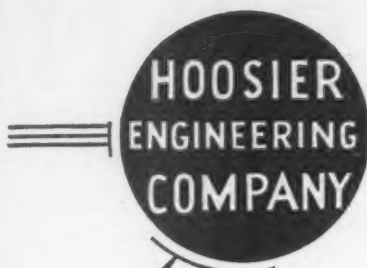


### GARRISON ENGINEERING CORPORATION

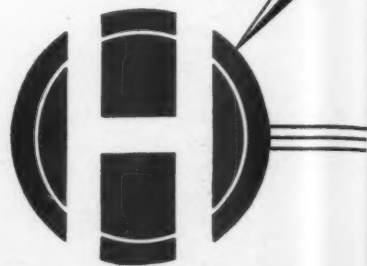
Factories and Executive Offices

GREAT BARRINGTON, MASSACHUSETTS

OFFICES AND DISTRIBUTORS IN PRINCIPAL CITIES



A constantly improving organization, HOOSIER today is in better position than ever to erect any transmission line in any locality, at the lowest possible cost consistent with best construction practices.



## ERECTORS OF TRANSMISSION LINES

Canadian Hoosier  
Engineering Co.,  
Ltd., Montreal

46 South Fifth Street,  
Columbus, Ohio

136 Liberty Street  
New York City

# SEND FOR THIS FREE BOOKLET



**T**WO paints may look alike in the can and sometimes even on the surface to which they are applied, yet they may be constituted of widely differing ingredients and intended for as widely different uses.

Lead is of great value in some paints yet in others it is a detriment. Similarly linseed oil is indispensable in some paints while in others china wood oil is far superior.

Paints must be selected according to the service they are expected to render, the conditions of their use and abuse and the surfaces to which they are to be applied.

More than thirty years of experience has taught us the right combination of pigments and liquids for custom built paints, each one designed for its particular field.

In the booklet offered above we describe maintenance paint products specially designed for and used by more than five hundred public utilities. Send for a copy. It may be the means of solving many troublesome painting problems.

ONE  
OF  
71  
CUSTOM MADE  
PRODUCTS

## RUSTIKOTE

The coating for rusted metal. Stops rust and prevents further rusting. A transparent liquid which covers up to 1,000 square feet per gallon. Send for illustrated circular.

**The Tropical Paint & Oil Company**  
100-1300 W. 70th Street Cleveland, Ohio



*It's easier to sell the  
radio equipped with  
nationally-known tubes*

*—just as* **IT'S EASIER TO SELL  
THE RANGE EQUIPPED WITH  
NATIONALLY-ADVERTISED,  
NATIONALLY-KNOWN  
ROBERTSHAW  
OVEN-HEAT-CONTROL**

*Nationally Advertised - Known to Women*

Link a famous name with a famous name, and sales for the product are made easier, quicker, smoother.

Robertshaw speeds the sales of modern gas ranges because its oven-heat-control is known to every woman.

Once a woman hears that the range is Robertshaw-equipped, she knows she is buying a combination of the best in modern cookery. She knows that her range selection is a wise one. The name Robertshaw will help you to sell ranges because it is a nationally-known name.

**ROBERTSHAW THERMOSTAT COMPANY, YOUNGWOOD, PENNA.**

*Sell the ranges equipped with*

**ROBERTSHAW OVEN-HEAT-CONTROL**  
MORE THAN 2,500,000 IN USE



# Locating ironing machine prospects by telephone

Owing to the low saturation on this major appliance and the rapidly increasing interest on the part of housewives in electric ironers, sales employees trained in the use of our Automatic Telephone Canvassing Manual are locating live prospects for ironing machines at a minimum expense of time and money.

This is only one of the many successful prospect-finding and sales-building methods taught sales employees of Public Utility Companies enrolled for the Hurley Sales Foundation (Home Study) course. Enrollment entails no cost, other than a few cents for postage, to either employer or employee.

A copy of this effective loose-leaf Automatic Telephone Canvassing Manual will be sent, free and post-paid upon request, to any Public Utility merchandising executive.



## *Address*

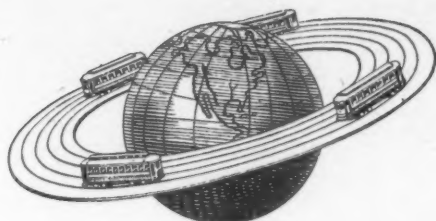
E. N. HURLEY, JR., PRESIDENT  
HURLEY MACHINE COMPANY  
54th Ave. and Cermak Road, Chicago, Ill.



## INDEX TO ADVERTISERS

<b>A</b>	
Addressograph-Multigraph Corporation .....	7
Aluminum Company of America .....	67
American Coach & Body Company, The .....	5
Anchor Post Fence Company .....	78
Arco Company, The .....	70
<b>B</b>	
Babcock & Wilcox Company, The .....	77
Barber Gas Burner Company, The .....	24
Barco Manufacturing Company .....	57
Black & Veatch, Consulting Engineers .....	93
Blaw-Knox Company .....	65
Buffalo Forge Company .....	26
Burroughs Adding Machine Company .....	13
<b>C</b>	
Carter, Earl L., Consulting Engineer .....	93
Chapman Valve Manufacturing Company, The .....	28
Cheney, Edward J., Engineer .....	93
Chevrolet Motor Company .....	21
Cities Service Company .....	71
Collier, Barron G., Inc. ....	91
Combustion Engineering Company, Inc. ....	15
Connelly Iron Sponge & Governor Company .....	33
Copperweld Steel Company .....	68
Coxhead, Ralph C., Corporation .....	80
Crescent Insulated Wire & Cable Company, Inc. ....	75
<b>D</b>	
Davey Tree Expert Company, The .....	72
Delta-Star Electric Company .....	65
Dennison Manufacturing Company .....	19
Dictaphone Sales Corporation .....	76
Dictograph Products Company, Inc. ....	69
Ditto, Inc. ....	37
<b>E</b>	
Electric Storage Battery Company, The .....	40
Elliott Addressing Machine Company, The .....	55
Elliott Company .....	94
Estate Stove Company, The .....	66
<b>F</b>	
Ford, Bacon & Davis, Inc., Engineers .....	93
Forest City Foundries Company, The .....	34
Frigidaire Corporation .....	39
<b>G</b>	
Garrison Engineering Corporation .....	85
General Electric Company .....	Outside Back Cover
Golden-Anderson Valve Specialty Company .....	40
Goodrich, B. F., Company, The .....	3
Grand Rapids Loose Leaf Binder Company .....	24
Grinnell Company, Inc. ....	38
<b>H</b>	
Hammermill Paper Company .....	43
Hays Manufacturing Company .....	66
Hoosier Engineering Company .....	86
Hurley Machine Company .....	89
Hygrade Sylvania Corporation .....	42
<b>I</b>	
Ilseco Copper Tube & Products, Inc. ....	33
International Business Machines Corporation .....	16
International Harvester Company, Inc. ....	51
I-T-E Circuit Breaker Company .....	11
<b>J</b>	
Jackson & Moreland, Engineers .....	93
Jensen, Bowen & Farrell, Engineers .....	93
Johnston & Jennings Company, The .....	53

(Concluded on Page 92)



**T**HE Transit Industry, even in the most trying times, has never relaxed its will to progress. The evidence of this may be seen in the many expansion and modernization activities throughout the country.

This Organization has grown up with the Transit Industry and we shall be pleased to serve its new additions as we served the Industry as a whole for over 40 years.



**BARRON G. COLLIER**

INCORPORATED

CANDLER BUILDING, NEW YORK CITY

WITH OFFICES AND ASSOCIATED COMPANIES  
THRU THE UNITED STATES, CANADA AND CUBA

## INDEX TO ADVERTISERS (Concluded)

<b>K</b>	
Kerite Insulated Wire & Cable Company, Inc., The .....	25
Ketchum, Inc. ....	Inside Back Cover
Kinnear Manufacturing Company, The .....	22
Kisco Boiler & Engineering Company .....	81
Kitson Company .....	68
Klein, Mathias & Sons .....	40
<b>L</b>	
Lincoln Electric Company, The .....	61
Lindemann, A. J. & Hoverson Company .....	72
Link-Belt Company .....	74
<b>M</b>	
Merco Corporation, The .....	73
Merco Nordstrom Valve Company .....	79
Monroe Calculating Machine Company, Inc. ....	41
<b>N</b>	
National Carbon Company, Inc. ....	20
National Electric Products Corporation .....	46
Neptune Meter Company .....	59
<b>O</b>	
Owens-Illinois Glass Company .....	45
<b>P</b>	
Pennsylvania Transformer Company .....	53
Pittsburgh Plate Glass Company .....	44
Pittsburgh Reflector Company .....	83
Power Transmission Council .....	17
Pyrene Manufacturing Company .....	32
<b>R</b>	
Ray-O-Vac Company .....	76
Reliance Gauge Column Company, The .....	30
Remington Rand, Inc. ....	9
Richey, Albert S., Engineer .....	93
Ridge Tool Company, The .....	36
Riley Stoker Corporation .....	18
Robertshaw Thermostat Company .....	88
Royal Typewriter Company, Inc. ....	35
<b>S</b>	
Safety Equipment Service Company, The .....	23
Safety Gas Main Stopper Company .....	76
Sanderson & Porter, Engineers .....	93
Sangamo Electric Company .....	65
Silex Company, The .....	Inside Front Cover
Simplex Valve & Meter Company .....	50
Socony-Vacuum Oil Company, The .....	29
Spooner & Merrill, Inc. ....	93
Star Brass Manufacturing Company .....	72
<b>T</b>	
Titan Valve & Manufacturing Company, The .....	31
Tropical Paint & Oil Company, The .....	87
Truscon Steel Company .....	49
<b>V</b>	
Vulcan Soot Blower Corporation .....	84
<b>W</b>	
Walker Electrical Company .....	30
West Bend Aluminum Company .....	82
Westinghouse Electric & Manufacturing Company .....	27
Wheeler, C. H., Manufacturing Company .....	84
Wolf, Mark, Public Utility Consultant .....	93

::

**PROFESSIONAL DIRECTORY**

::

DESIGN  
CONSTRUCTION  
OPERATING COSTS

**Ford, Bacon & Davis, Inc.**  
**Engineers**  
**VALUATIONS & REPORTS**

RATE CASES  
APPRAISALS  
INTANGIBLES

CHICAGO

PHILADELPHIA

NEW YORK

DALLAS

WASHINGTON

**SANDERSON & PORTER****ENGINEERS**

**VALUATION DEPARTMENT**  
**APPRAISALS AND RATE QUESTIONS**

CHICAGO

NEW YORK

SAN FRANCISCO

**MARK WOLFF***Public Utility Consultant*

Investigations, Rate Studies, Valuations, Reports, Expert Testimony  
Corporate Reorganizations

261 BROADWAY, NEW YORK, N. Y.  
11 SOUTH LA SALLE STREET, CHICAGO, ILL.

**BLACK & VEATCH****CONSULTING ENGINEERS**

Appraisals, investigations and reports,  
design and supervision of construction  
of Public Utility Properties

4706 BROADWAY

KANSAS CITY, MO.

**JACKSON & MORELAND****ENGINEERS**

PUBLIC UTILITIES—INDUSTRIALS  
RAILROAD ELECTRIFICATION  
DESIGN AND SUPERVISION—VALUATIONS  
ECONOMIC AND OPERATING REPORTS

BOSTON

NEW YORK

**EARL L. CARTER**  
*Consulting Engineer*

REGISTERED IN INDIANA AND NEW YORK

**PUBLIC UTILITY**  
**VALUATIONS AND REPORTS**

814 Electric Building

Indianapolis, Ind.

**JENSEN, BOWEN & FARRELL****Engineers****Ann Arbor, Michigan**

Appraisals—Rate Investigations  
Engineering Reports to Banks and Bond Houses

**EDWARD J. CHENEY**  
**ENGINEER***Public Utility Problems*

61 BROADWAY

NEW YORK

**ALBERT S. RICHEY**  
**ENGINEER**

WORCESTER, MASSACHUSETTS

PUBLIC UTILITY REPORTS—APPRAISALS  
RATES—OPERATION

**Public Utilities Fortnightly**

is read every other week by the key men  
in the utility industry. Keep your name  
before them by being a regular advertiser  
in our Professional Directory.

*Rates Will Be Sent Upon Request.***SPOONER & MERRILL, INC.**  
*Consulting Engineers*

Design—Supervision of Construction  
—Reports—Examinations—Valuations

20 North Wacker Drive

Chicago, Ill.

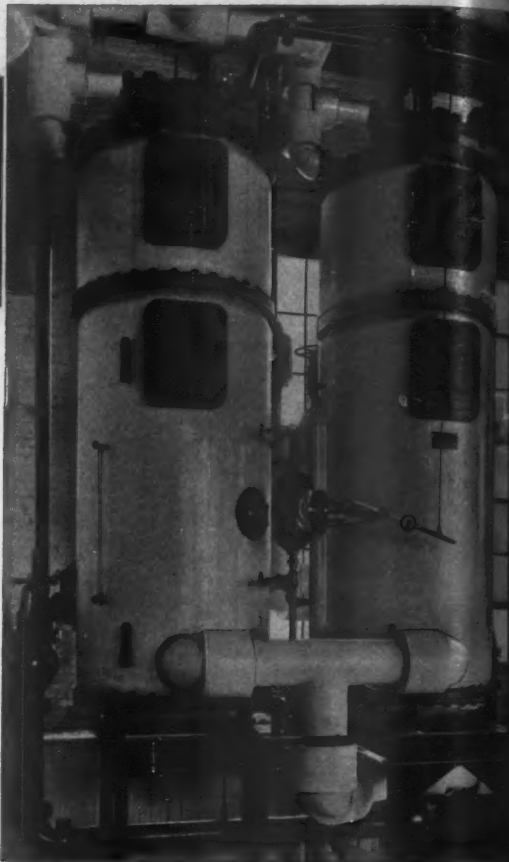
# What the doctor ordered

## THEY WERE HAVING TROUBLE . . . .

with corrosion in boilers and pipe lines, necessitating a continuous program of repair and replacement. They called in the Elliott man, and the proper size and type of Elliott deaerating feed water heater was installed. Result: corrosion completely eliminated. The remedy was exactly "What the doctor ordered."

That, in brief, has happened in many plants over the past 16 or 17 years since Elliott pioneered the deaeration of boiler feed water. It is still happening today, perhaps not as frequently, because engineers have learned the importance of preventing corrosion by deaerating the feed water before trouble starts.

The cost of deaeration is really negligible. The installation of Elliott deaerating equipment can be justified almost alone on the basis of its 100 per cent heating performance. For it heats right up to the saturated temperature of the maximum steam pressure supplied to the heater. Deaeration is therefore very cheap insurance against corrosion worries.



## ELLIOTT DEAERATORS and DEAERATING HEATERS

are built in all sizes, all types with openings and access built to the job.

Come to "Deaeration Headquarters" for the benefit of Elliott's long experience in designing and applying deaerating heaters and deaerators.

# ELLIOTT COMPANY

PITTSBURGH, PA.

Deaerator and Heater Department: JEANNETTE, PA.  
District Offices in Principal Cities

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



ly 2.

T  
S and  
HEAT

all to  
access

ion B  
benefit  
ence b  
g dea  
erator

+

ent)

T

and

ATE

d typ

esson

Ho

effi

e in

rean

corn

D

D

D

D

D

D

D

D

D

D

D

# FOR PUBLIC UTILITIES

## *Public Relations Service*

More and more outstanding business organizations are using skilled public relations service

to protect markets  
to prevent injurious legislation  
to avoid labor troubles  
to establish and maintain a wholesome  
relationship with stockholders, em-  
ployees, actual and potential customers  
and the general public.

That kind of public relations service involves a great deal more than writing. The members of the staff of Ketchum, Inc. are fully equipped by training and experience to meet almost any business problem in the broad field of public relations.

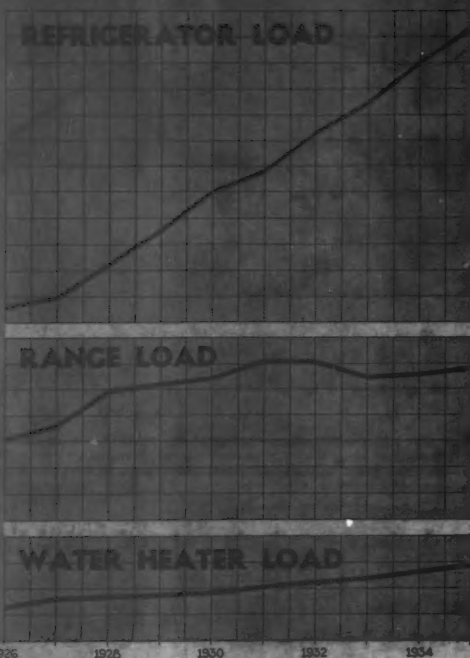
We would appreciate an opportunity of telling you what we could do for your company.

## *Ketchum, Inc.*

PPERS BUILDING • PITTSBURGH, PA.

TON G. KETCHUM   NORMAN MACLEOD   GEORGE KETCHUM   ROBERT E. GROVE

*This page is reserved under the MSA PLAN (Manufacturers Service Agreement)*



OK

**CONCERTED EFFORT  
IS PUTTING THESE**

OK

OK

*But . . . .*

**HERE'S ANOTHER LOAD  
CURVE . . AND IT NEEDS  
YOUR ATTENTION**



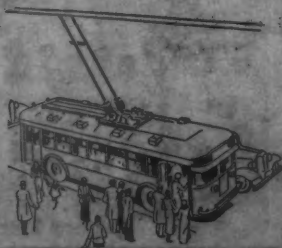
**B**ECAUSE an annual load of 2 billion kw-hr is at stake. It has been slipping away — into the gasoline-bus field. It can be saved — by the installation of modern electric transit equipment.

The trackless electric coach — there are nearly a thousand now in service — is the best answer to the public-transit problem in many situations. It affords transportation immeasurably more attractive than do most public vehicles now in use. It preserves present investment in transit facilities. From the standpoint of power feed, even the smallest trackless-trolley line

is the equivalent, in revenue dollars, of hundreds of electric appliances.

We urge more consideration of the importance of the transportation power load — lost whenever elec-

tric drive is abandoned. We invite you to get better acquainted with the modern trackless electric coach — which can help you preserve this load. And we suggest that you work with transit operators — one of your best power customers — on behalf of electric transportation. We are co-operating and have had a large part in making the electric coach a success. General Electric, Schenectady, N.Y.



**GENERAL  ELECTRIC**